

IV. Accounting Oversight and Funds Management

A. Summary of Results and Comparisons

In this area we reviewed the utilities' accounting oversight and funds management. Specific areas reviewed include: corporate control environment; program design and funding; program oversight and management; accounting and cost tracking controls; and compliance. The adequacy of controls varied by utility (greater weaknesses were observed at SCG than at the other utilities); however, opportunities for improvement in program controls were identified at all utilities. Areas for improvement include separation of duties, checks and balances, system overrides and approval levels. Improvements in accounting and cost tracking activities are also possible at the Sempra utilities.

Although program design and funding is a collaborative process, driven partly by Commission goals, most of the utilities adequately fulfill their responsibilities in this area. The primary exception is SCG which relies too heavily on the Commission for program and budget design.

Areas for improvement in program management and administration were identified at all utilities. Perhaps the greatest weakness at most utilities was in the procurement and contractor selection process and vendor oversight, as summarized below:

- SCG and SDG&E have no formalized policies and procedures that define and control the decision-making process regarding the use of in house staff versus contractors, or regarding competitive bidding. The process for providing on-site inspections at the Sempra utilities is weak and needs improvement. Documentation for many of the inspections does not exist and is not even required by SCG. Voucher processors at SDG&E and SCG are allowed to override system selected inspections leading to customers who were paid even though inspections did not occur.
- SCE's procurement practices are inadequate and the utility does not utilize appropriate criteria when making initial outsourcing decisions. Significant vendors have sole-source contracts at SCE and competitive bidding is infrequent. Invoices are extensively reviewed and audited, however direct procedures are not in place to ensure that the work for which invoices have been submitted has actually been performed. No direct work is performed to ensure that work has actually been done as described in the documentation.

Exhibit IV-1 provides a summary of the results of our review. **Exhibit IV-2** and **Exhibit IV-3** list conclusions and recommendations by utility.

Exhibit IV-1: Overview of Utility Controls

Area	Adequate? (Yes/No)			
	PGE	SCE	SDGE	SCG
Corporate Control Environment				
1. Management organization provides adequate direction and oversight. There is effective communication to address problems and avoid mistakes.	Yes	Yes	Yes	No
2. Executive management is committed to internal control and regulatory compliance. Codes of Conduct and related compliance programs are adequate.	Yes	Yes	Yes	No
3. Organization design and staff contributes to appropriate control environment. <ul style="list-style-type: none"> Separation of duties is adequate. Staff is knowledgeable and adequately trained. The utility ensures staff continuity. 	Yes	Partial	Partial	Partial
4. The internal audit function of the PGC program is adequate. <ul style="list-style-type: none"> Audits are conducted by qualified personnel. Audit plans incorporate periodic reviews of major systems, tests of regulatory compliance, and program specific audits. They provide for appropriate follow-up. Independent audits are performed in accordance with regulatory requirements. Management initiates corrective action on findings. 	Yes	No	Yes	No
Program Design and Funding				
5. The utility's PGC personnel participate in statewide workshops and contribute to program design and reporting requirements.	Yes	Yes	Yes	Yes
6. The utility has developed an appropriate process for timely identification of changes in regulatory requirements and incorporating these requirements into its energy efficiency programs. Commission requirements are adequately communicated to project managers, who are held accountable for compliance with Commission requirements.	Yes	Yes	Yes	Yes
7. Procedures are in place to ensure program selection; budgeting and funding are performed within Commission guidelines.	Yes	Yes	Yes	Partial
Program Oversight and Management				
8. Management performs effective oversight of PGC programs. Management reviews actual performance versus budgets and program goals.	Yes	Yes	Partial	Partial
9. The utility has established appropriate procedures for determining committed funds, tracking expenditures against commitments and releasing commitments.	No	Yes	Yes	Partial
10. PGC procurement policies are appropriate and consistent with corporate procurement policies. <ul style="list-style-type: none"> There is a formal decision-making process for outsourcing vs. in-house work. There is a competitive contractor selection process. Contractor/vendor relationships are evaluated periodically. There is compliance with purchase order approval limits. 	Yes	No	No	No
11. Contractor oversight and monitoring is adequate. <ul style="list-style-type: none"> The Energy Efficiency group has established procedures to monitor and control contractor activities. Work performed by contractors is verified. Contractor/vendor invoices are reviewed to ensure accuracy. 	Yes	No	Partial	No
12. On-site inspections are performed as appropriate.	Yes	Partial	No	No
Accounting and Cost Tracking Controls				
13. PGC program revenue and disbursements systems are integrated with the financial accounting systems and are adequately designed and documented.	Yes	Yes	No	No
14. Program managers receive monthly budget vs. actual cost reports. Reviews are conducted to ensure program charges are appropriate, and variances are reviewed and resolved.	Partial	Yes	Yes	Partial
15. The utility has established appropriate checks and quality control procedures regarding payment of incentives.	Yes	No	Yes	Partial
16. Authorization levels for expenditure approval are appropriate.	Yes	No	No	Partial
17. There is adequate rebate application review and approval.	Yes	Partial	Yes	No
Compliance (Program Rules)				
18. Program reporting is based upon information contained in the accounting records and is in compliance with Commission requirements.	No	Yes	Yes	Partial
19. Participant eligibility for a program is determined.	Yes	Yes	Yes	Yes

Exhibit IV-2: Conclusions by Utility

Corporate Control Environment	PG&E	SCE	SDG&E	SCG
	<p>1. PG&E has an adequate internal audit program that makes a positive contribution to the design and implementation of PGC program systems and internal controls.</p>	<p>19. Despite SCE's corporate control consciousness, energy efficiency programs and expenditures are not adequately reviewed and audited. Control deficiencies exist, but were not identified by SCE personnel.</p> <p>20. While SCE's energy efficiency staff is knowledgeable and adequately trained, the manner in which certain tasks are allocated among staff and vendors is not sufficient to preclude or detect potential irregularities. Additionally, there is inadequate planning for staff continuity if some positions are vacated.</p>	<p>36. SDG&E has demonstrated sufficient commitment to regulatory compliance and internal control in the design of its Energy Efficiency Programs organization.</p> <p>37. Although elements of the energy efficiency program system of controls are designed within the framework of the broader Sempra Energy corporate policies and controls, during the audit period, the energy efficiency program did not consistently comply with these controls.</p> <p>38. Sempra has an adequate internal audit program that makes a positive contribution to the design and implementation of PGC program systems and internal controls.</p> <p>39. Incentive and rebate processing during the audit period may have been compromised by weaknesses in the related systems of internal controls.</p>	<p>53. SCG administers energy efficiency programs in a lax environment with limited controls. The enforcement of controls is uncertain and decision-makers do not utilize the supporting analyses that are standard business practice in most companies.</p> <p>54. Only one audit of energy efficiency programs was performed during the audit period and the results of that audit have not been implemented in a timely manner.</p>

Program Design and Funding	PG&E	SCE	SDG&E	SCG
<p>2. During program years 1998 through 2000, PG&E's process to track the status of budgets and expenditures throughout the year was fragmented and ad-hoc in nature. PG&E's financial reporting capabilities improved following the Commission's establishment of quarterly reporting requirements in 2000.</p> <p>3. PG&E has established adequate controls to ensure that funds are not shifted between programs or program years without proper authorization.</p>	<p>21. During the audit period, the program selection and funds allocation process was a collaborative process involving the Commission, the CBEE, the Utilities, other interested parties, and in some cases the public. SCE participated in this process and programs were developed and funded in accordance with the Commission's objectives.</p> <p>22. SCE appropriately communicates Commission requirements to program and project staff who are held accountable for compliance with Commission requirements. SCE management tracks progress against Commission goals.</p> <p>23. SCE's fund shifting activities are in accordance with Commission guidelines and policy goals, and SCE's decision-making process for determining fund shifting opportunities is adequate.</p>	<p>40. SDG&E made an adequate effort to contribute to the design of PG&E programs and policies.</p> <p>41. SDG&E establishes program budgets based directly on the budgets approved by the Commission and had an effective process to track expenditures.</p> <p>42. SDG&E does not have any formal guidelines or processes to identify and evaluate fund-shifting opportunities, except for the guidelines that are provided by the Commission. Although SDG&E fund shifting was consistent with the Commission's directives, SDG&E's approach to fund shifting in 2002 caused unnecessary budget variances and led to SDG&E missing a fund shifting opportunity.</p> <p>43. In 2002, SDG&E did not consistently meet its energy efficiency program goals. The existing reporting infrastructure provides timely information necessary to identify problems associated with program budgets and objectives. However, management does not consistently act upon this information in a timely manner.</p>	<p>55. The program selection and funds allocation process is consistent with Commission direction, although SCG relies on Commission for program and budget selection as well as funding.</p> <p>56. SCG's fund shifting activities are in accordance with Commission limitations as to amounts shifted per year; however, SCG's decision making process for determining fund shifting opportunities is deficient.</p>	

Program Oversight and Management	PG&E	SCE	SDG&E	SCG
	4. PG&E has established a formal goal setting and performance evaluation process for the CEM program managers that fosters accountability.	24. Program performance is reviewed by Program Managers and senior energy efficiency management.	44. During the audit period, SDG&E did not have adequate procedures relating to the selection and control of contractors.	57. SCG does not prepare any periodic written energy efficiency budget to actual analyses, nor does it track progress against specific goals other than the annual goals set by the Commission.
	5. PG&E's policies and procedures over the contractor selection process provide a reasonable level of assurance that such contractors are selected in accordance with sound business practices.	25. SCE made efforts to mitigate the potential negative effects of the commitment process and blueCONSULTING's audit found no evidence of SCE abuse of the commitment process.	45. SDG&E does not always follow Sempira's competitive bidding procurement policy, although the policy itself is somewhat vague.	58. While SCG achieved its 2002 milestone goals (e.g., hard-to-reach (HTR), numbers of surveys completed), it failed to achieve its therm savings goals in three of its six programs with energy savings goals.
	6. PG&E has adequate processes to monitor and control contractor activities and to verify work performed by contractors.	26. SCE's resource planning and procurement practices are inadequate. SCE does not utilize appropriate criteria when making initial outsourcing versus in-house decisions; although consistent with stated Corporate policy, SCE's contractor and vendor selection processes do not promote competitive selection.	46. The reporting of annual energy efficiency program costs to the Commission reflects actual expenditures and commitments, as do the financial statements for these programs. SDG&E tracks actual expenditures against commitments, but this is not reported to the Commission.	59. The energy savings associated with commitments dropped in future years are not routinely assessed against the energy savings amounts claimed in the year of the commitment. Thus, annual reports showing the percentage of energy savings goals achieved are subject to change in subsequent years as drop-offs occur, and reported energy savings may be higher than actual, final energy savings.
	7. blueCONSULTING found no indication that PG&E shifted funds without proper authorization. However, blueCONSULTING identified the possibility that PG&E incorrectly classified \$1.4 million in Savings by Design Program customer incentives, resulting in the effective shifting of program year 1999 funds to program year 2000.	27. Contractor and vendor monitoring is inadequate. SCE has no direct processes to ensure the work has actually been performed by the vendor for certain programs. As a result, SCE exposes its programs to potential abuse.		60. SCG has no formalized policies and procedures that define and control the decision-making process regarding the use of in-house staff versus vendors, although informal criteria exist.
	8. PG&E did not perform a reconciliation of outstanding commitments for program years 1998 through 2001 until January 2002.	28. Controls and monitoring of on-site inspections, when performed, are adequate. However, discretionary overrides of programs selected for inspection diminishes the overall effectiveness of the controls.		61. Processes used to select contractors need strengthening to assure that value is received for energy efficiency dollars spent.
	9. There are indications that commitments are overstated for the Savings by Design program.			62. SCG's authorization levels for energy efficiency program expenditures have been established and disseminated through corporate policies and procedures that appear reasonable and appropriate. While the policy is good, the degree of compliance with policy is unknown, as error rates were not tracked.
				63. SCG's program for verification of vendor work and on-site inspections is not effective.

	PG&E	SCE	SDG&E	SCG
Accounting and Cost Tracking	<p>10. PG&E's internal controls over rebate and incentive processing provide a reasonable level of assurance that such payments are made in accordance with applicable program requirements. However, such controls have not always been effective in preventing questionable expenditures.</p>	<p>29. SCE Program Managers have been assigned considerable responsibility for the review and approval of program costs and accounting, which they discharge effectively. Program-level review of expenditures is timely and comprehensive. Program expenditures are extensively monitored before, during and after the invoice payment process.</p> <p>30. While controls over rebate application review and payment procedures are adequate, these processing functions are redundant and inefficient.</p>	<p>47. SDG&E's overall management of energy efficiency program expenditures met the Commission's objectives during the audit period. However, at the program and cost category level there were variances from approved budgets.</p> <p>48. SDG&E did not adequately execute its established policy related to authorized approval limits creating a risk that expenditures were inappropriately approved.</p> <p>49. SDG&E processes and procedures regarding program rebates and incentives were adequate but could be improved.</p> <p>50. During the audit period, the systems and procedures used by SDG&E for program accounting and the tracking of expenditures and commitments were adequate.</p>	<p>64. SCG uses its reports to the Commission as its primary record of budget to actual and available funds going forward, and did not develop formal, internal reports for its own use during much of the audit period.</p> <p>65. Although the processes SCG uses to disburse incentives and rebates are adequately integrated with the corporate financial accounting system, SCG has not established appropriate checks and quality control procedures regarding payment of incentives or rebates.</p>

Compliance with Program Rules	PG&E	SCE	SDG&E	SCG
	<p>11. PG&E's systems and procedures used to prepare energy efficiency program budgets and to report on the status of program expenditures have been designed and maintained in a manner that conforms to the requirements of the Commission.</p> <p>12. blueCONSULTING's review of the Residential Contractor Program and Home Energy Surveys indicate that PG&E has effective management and oversight of these programs.</p> <p>13. blueCONSULTING's review of Savings by Design files identified possible instances of non-compliance in the enforcement of commitment terms for PY 1999 and in project eligibility for PY 2001. blueCONSULTING identified other anomalies in the PY 1999 program that may constitute fund shifting.</p> <p>14. PG&E complied with the Express Efficiency program rules.</p> <p>15. PG&E has established processes to ensure its compliance with SPC rules.</p> <p>16. The results of blueCONSULTING's review of the SPC programs indicate that PG&E has complied with the program rules.</p> <p>17. blueCONSULTING's review of SPC project files identified no deficiencies.</p> <p>18. blueCONSULTING's review of PG&E's SPC data identified 52 projects which remain open in spite of the fact the program is over, and three projects for which PG&E was not reimbursed the amount which it initially overpaid.</p>	<p>31. SCE has established program-specific procedures to verify participant eligibility.</p> <p>32. SCE has departed from program rules for purposes of customer service; however, this is done on an exception basis rather than as a practice.</p> <p>33. SCE has established processes to address compliance with SPC rules.</p> <p>34. With the possible exception of documentation and application requirements, SCE's SPC program was in compliance with Commission and program rules during the audit period.</p> <p>35. Controls over potential "double dipping" exist, but are manual in nature.</p>	<p>51. For the selected non-SPC programs, limited testing disclosed no compliance exceptions.</p> <p>52. SDG&E complied with the SPC program rules; however, blueCONSULTING did identify one project in which measures appear to have been installed prior to approval of the project application.</p>	<p>66. Requirements for Express Efficiency Program are not strictly followed by SCG.</p> <p>67. Funds charged to the Savings by Design program in 2002 were spent internally at SCG with little or no obvious energy savings benefit.</p> <p>68. A lack of oversight and control contributed to expenditures for Residential Audits during the audit period that seemed excessive.</p>

Exhibit IV-3: Recommendations [Note 1]

Recommendations for the Commission	
3.	Determine whether PG&E's use of PY 2000 contracts for PY 1999 Savings by Design incentives constitutes fund shifting. If appropriate, consider disallowing \$1.4 million in Savings by Design program customer incentive payments or grant PG&E retroactive approval to shift unexpended PY 1999 funds to PY 2000.
17.	Develop new policies to better manage programs with commitments and reservations. Currently, certain of the utilities offer incentives only until Actual plus Committed Expenditures equal 100 percent of the available budget. Since some amount of cancellations is expected, this ensures that these programs under-spend available incentives. Utilities can take it upon themselves to establish a policy of accepting commitments to some level over 100 percent; however, this causes the utility to bear the risk of implications if the program goes over-budget.
18.	Clarify the Commission's intent regarding cost category level budgets, specifically regarding i) whether these are guidelines or actual budgets which should be adhered to and ii) circumstances under which deviations from cost category level budgets are acceptable.

Recommendations for the Company	
PG&E	1. PG&E should tighten its administrative controls over the Savings by Design and Standard Performance Contract programs.
	2. PG&E should review its customer files related to commitments to identify projects which have been inactive for an inordinate length of time and determine whether these should be excluded from reported commitments.
SCE	4. The charter of the Internal Controls function should be reviewed, and the work of Internal Audit should be expanded.
	5. The assignment of processing duties should be reviewed and modified to preclude the possibility of the same individual controlling all phases leading to payment of incentives. The practice of having checks returned to program staff by accounts payable should be discontinued. (According to SCE, a procedure has been implemented to ensure incentive checks are mailed directly from SCE Accounts Payable to the recipient.)
	6. The criteria for outsourcing vs. in-house processing decisions should be reviewed and updated to reflect the status of mature programs.
	7. The contractor and vendor selection process should include more frequent competitive bidding. The practice of extending the term and/or increasing the contract costs through frequent change orders should also be reconsidered. The approval authority limits and/or processes for sole-source contracting and for purchase order changes should be lowered to make current practices more visible within the organization.
	8. Contractor and vendor monitoring and verification processes should be strengthened by the development of <u>direct</u> processes to ensure that the work was actually performed.
	9. Consolidation of processing functions, centers and systems should be comprehensively reviewed in 2004.
	10. As part of the consolidation review, the use of multiple tracking systems/databases should be reconsidered.
	11. The discretionary overrides of programs selected for inspection and the lack of an audit trail or review of the overrides in the Residential Rebate and Express Efficiency systems should be reviewed by CSBU internal controls.
	12. SDG&E should modify how it approaches fund shifting opportunities to be more consistent with Commission guidelines. Specifically, fund shifting should no longer be considered a method of accommodating budget overages, but rather should be viewed as a method of optimally redeploying funds that cannot be used for their original purpose.
	13. SDG&E should incorporate the attainment of energy efficiency program goals into the performance reviews of Energy Efficiency Managers and Program Managers. It is recommended that SDG&E add the Competency "Energy Efficiency Program Goals Attained" on all Performance Reviews.
SDG&E	14. PGC Program Management should modify the procurement policy related to contract requirements, and procurement controls should be strengthened.

Note 1: Numbering reflects the recommendation numbers included in the recommendation sections of this report. As a result, the numbers shown above may not be consecutive.

Utility	Recommendations for the Company
	<p>15. SDG&E should develop a process to ensure that individuals approving requisitions have the appropriate level of authority. One potentially cost-effective approach would be to incorporate approval limit confirmation into SAP. SDG&E should limit the authority to delegate approvals, particularly the ability to delegate approval authority to lower ranking individuals. Approval delegations should be temporary in nature based on specific events, i.e., vacations or short-term leave of absence, temporary assignment to special projects.</p> <p>16. System controls in EETS should be re-evaluated with particular attention paid to the Processors' ability to override system generated alerts or information. Where the ability to override fields is needed, SDG&E should require that an explanation be entered into a Comments field. Furthermore, the override should be tracked in a system log noting the user's identity, and the date and time of the override. The information in the override log should be kept permanently, as opposed to the current practice of only capturing information pertaining to the most recent change.</p>
SCG	<p>19. SCG should strengthen its "tone at the top" with regard to compliance with Commission directives and guidelines in the programs area within increased formal communications and increased formal, internal financial reporting.</p> <p>20. Increase the frequency of internal or external audits of energy efficiency programs to ensure that the programs are properly managed and that appropriate controls are in place.</p> <p>21. Require routine, formal performance reporting (budget performance and performance against goals.) Reports should be disseminated to and reviewed by management.</p> <p>22. SCG should adopt stronger controls surrounding the reclassification of costs and expenses. Currently, a program manager can transfer expenses from one program to another based upon his/her judgment alone of what is appropriate. Such reclassifications of costs or expenses should be justified by detailed estimates or calculations. A change in policy would preclude expenses from being adjusted to meet authorized funding levels, a practice which is tantamount to shifting funds outside the guidelines set out by the Commission.</p> <p>23. Identify primary reasons for not meeting energy savings for all projects and ensure that future goals are met. SCG should develop the procedures and formal periodic reporting necessary to support informed monthly reviews and intelligent decision-making in response to reported progress toward program goals.</p> <p>24. Increase the accuracy of reporting by ensuring that energy savings associated with commitments dropped in future years are routinely "trued-up" against the energy savings amounts claimed in the year of the commitment. SCG should develop a system to track commitments, scheduled payments, expiration dates, and released funds in real-time.</p> <p>25. Strengthen the process used to select contractors, including utilizing competitive bidding.</p> <p>26. Improve vendor management processes.</p> <p>27. Improve the on-site inspection process.</p> <p>28. SCG should redesign and upgrade procedures and systems to include standard procedures, systems with controls and standard reports, and the use of new system capabilities to manage programs effectively. PGC program disbursements are based on offline systems and non-ledger memorandum accounts. SAP is used, but only for cost accumulation and limited variance reporting of program expenditures against authorized budgets.</p> <p>29. SCG should undertake significant systems improvement in the entire program management area.</p> <p>30. Establish appropriate checks and quality control procedures regarding payment of incentives and rebates.</p>

Note 1: Numbering reflects the recommendation numbers included in the recommendation sections of this report. As a result, the numbers shown above may not be consecutive.

B. Background and Approach

1. RFP Task Area:

Assess the effectiveness of oversight, accounting, and financial funds management.

2. Objectives

- Determine whether the utility's administration of its energy efficiency programs is consistent with applicable Commission decisions and legislation.
- Determine whether the utility has provided for efficient and effective oversight of the energy efficiency program.
- Determine whether the amount of funding, including funds shifted, was consistent with applicable Commission policy and legislation.
- Determine whether the utility has established effective controls for PGC program administration and whether they are operating as intended.
- Assess the accuracy of the utility's reported committed dollars for each program year, and its tracking of committed dollar payments and dropouts for subsequent years.

3. Background

The administration of energy efficiency programs in California has evolved over the last decade. Prior to 1996, the utilities administered energy efficiency programs as part of their demand side management efforts. During this period, the funding mechanism for utility energy efficiency programs was the GRC. GRCs were typically performed every three years, with the first year budget set at the beginning of the cycle. Utilities submitted annual advice filings in October to the Commission to update programs and budgets. Results were reported on a cash basis and did not include customer commitments. Commission resolutions were issued prior to the beginning of the following year.

With the introduction of deregulation, the Commission established a new direction for energy efficiency program administration and implementation: independent administration and market transformation. Because of the utilities' inherent conflict of interest between reducing sales through energy efficiency and maintaining market share in the new competitive market, the Commission advocated transferring the administration of energy efficiency programs away from the utilities.

From 1998 to 2002, California's energy efficiency policy continued to experience dramatic changes, best described in two distinct eras:

- **Market Transformation Era (1998 to 2000).** Following utility restructuring, the Commission adopted a long-term policy of market transformation, in which it hoped to encourage the development of a vibrant energy efficiency marketplace that would continue without ratepayer-funded subsidies. D. 96-01-009 stated "in a restructured environment, evaluating cost-effectiveness on the basis of a utility resource deferral may no longer be as

relevant. [The Commission has]...stated a preference...to shift to...programs with market transformation effects and education efforts that would not otherwise be provided by the competitive market.” The Commission also established the CBEE, an advisory board whose two main objectives were to: 1) transition from utility administration of energy efficiency programs to independent administration, and 2) oversee energy efficiency programs and policies during this transition. The Commission relied heavily on CBEE’s input in shaping program design, budgets, policy and reporting structures. During this period, the Commission actively pursued independent administration.

- **Resource Acquisition Era (2001 to 2002).** The Commission’s focus on market transformation continued until 2000, when, in the face of the state’s energy crisis, the Commission revised direction in favor of reducing energy consumption and achieving load reductions. In response to the crisis, the Commission created the Summer Initiative programs, intended to provide maximum energy and demand reductions. Funds for the Summer Initiative programs were drawn from prior year unspent PGC funds and from unspent pre-1998 DSM funds. The Summer Initiative was implemented alongside of and parallel to existing programs. The utilities were directed to administer these programs, but were not responsible for program performance. The Commission recommitted to programs focused on near-term energy savings, a “resource acquisition” strategy for design of energy efficiency programs. The Commission also directed utilities to make significant modifications to the program portfolio.

As a result of changes in program focus, the 1998 through 2002 programs were subject to differing emphasis, reporting requirements and program delivery constraints. **Exhibit IV-4** provides a summary of key changes.

Exhibit IV-4: Energy Efficiency Programs and Requirements Evolved from 1998 to 2002

Year	Key Events
1998	<p>Introduction of market transformation programs:</p> <ul style="list-style-type: none"> ▪ Upstream programs – focus on manufacturers and retailers. ▪ Third Party Initiatives – proposals from non-utility third parties with innovative ideas. ▪ Standard Performance Contract programs – designed to foster relationships between energy efficiency service providers (EESPs or ESCOs) and customers. <p>Continuation of long-standing rebate programs, information programs and audits. Expectation that new non-utility administrator would be in place by September 1998. Shareholder incentives were established which focused on program spending (25%), cost-effectiveness (32%) and achievement of SPC milestones (43%).</p>
1999	<p>Continued 1998 programs on a monthly basis until Program Year 1999 approved in March. Utility administration to continue until 2001. CBEE introduced 14 program funding categories. Programs costs and results were reported in these categories rather than by program. Some programs crossed multiple categories. Shareholder incentives focused on achievement of milestones.</p>
2000	<p>Utilities filed applications for PY 2000 and 2001 programs. Commission adopted policy rules, programs and funding mechanisms for programs through 2001. Abolished CBEE and added Commission staff to perform oversight. Summer Initiative implemented – utility and non-utility programs.</p>
2001	<p>Shifted focus to resource acquisition – energy savings and demand reduction. Workshops designed to solicit public comment on program design, budgets, cost-effectiveness and Market Assessment and Evaluation (MA&E). The Commission replaced the 14 funding program category structure with a simplified program area structure (residential, nonresidential, new construction). New fund shifting guidelines adopted. Shareholder incentives focused on energy savings.</p>

Year	Key Events
2002	<p>A fourth program area (crosscutting) was added to the existing program areas (residential, nonresidential and new construction).</p> <p>Commission created the concept of statewide and local programs.</p> <p>Programs selected through solicitation process. Utilities and other parties required to submit proposals for energy efficiency programs. Commission selected programs. Utilities required to contract with non-utility implementers for delivery of non-utility local programs.</p> <p>Created hard-to-reach targets to address previously underserved markets.</p> <p>Shareholder incentives eliminated.</p>

Source: SDG&E Orientation Presentation, August 14, 2003.

The following is a brief description of the energy efficiency programs delivered by the utilities:

- **Residential programs:** These programs offer incentives to Investor Owned Utility (IOU) residential customers to invest in energy efficient products. The incentives are in the form of direct customer rebates, vouchers presented to contractors for a reduced fee, point-of-purchase rebates, and other direct and indirect program participation incentives.
- **Nonresidential programs:** These programs are targeted to small-, medium-, and large-sized businesses (commercial, industrial, and agricultural) and provide rebates for numerous measures relating to lighting, process heat, ultra-low-polluting pump and motor retrofits, and various other commercial and industrial energy efficiency measures.
- **New Construction programs:** These programs offer incentives to builders to construct homes at least 15 percent more energy efficient than current California code standards.
- **Cross-cutting programs:** These are programs that typically have impacts that cut across several program categories, including information and marketing outreach efforts.
- **Codes, Standards, and Governmental programs:** These efforts support research, development, training, and other implementation efforts associated with the adoption of high-efficiency energy code standards.

Program Planning Cycle

During the audit period, program planning operated on a program year basis. A program year refers to the year the programs were offered to customers. Costs associated with a program year may be incurred in subsequent calendar years. A funding period is a timeframe defined by the Commission to fund, extend, or augment program funding. Commission decisions and legislation define how the utilities are to administer their energy efficiency programs, and address the following areas:

- **Program Design.** The Commission defines and approves all statewide and local energy efficiency programs.
- **Funding.** The Commission defines the funding for each program, and authorizes utilities to shift funds between programs within specifically defined parameters. Within programs, the Commission provides guidelines on how funds are to be used. A major area of focus addresses cost-effectiveness requirements, which provide a methodology for assessing the effectiveness of programs, as well as effectiveness targets.

- **Performance Evaluations.** The Commission details how the utilities are evaluated as to the effectiveness of their program administration. Most recently, these performance evaluations were defined in terms of energy savings achieved.
- **Reporting Requirements.** The Commission requires utilities to submit quarterly and annual reports pertaining to the energy efficiency programs.
- **Shareholder Incentive Mechanisms.** From 1998 until 2001, the Commission allowed the utilities to recover incentives for successful program implementation and management.

The annual program planning process involves collaboration among the utilities, the public and the Commission. The Commission annually sets general policy goals and direction. Initial program design and development follow Commission objectives, guidelines or policies. Taking the Commission's policy into account, the utilities consider untapped markets and new program ideas. Initial design is discussed by the utilities and then through public workshops if appropriate. The utilities may hold public workshops and meetings to obtain consumer and public input regarding the development and enhancement of their programs.

With regard to statewide programs, the utilities collaborate with each other to develop programs that they implement on a statewide basis. Marketing and promotional efforts are adjusted seasonally and as market conditions change. Measure mix is altered to maximize energy savings and to meet other policy goals. In October or November, the utilities file program plans for the subsequent year that provide significant detail about the programs such as program descriptions, budgets, implementation details and estimated energy savings.

Upon Commission review, approval and/or modification of the program plans through resolutions, decisions, or rulings the plans become Program Implementation Plans (PIPs). Subsequently, the utilities manage the programs and provide Quarterly Reports to the Commission regarding program progress, including budget and implementation status, and current energy savings. The utilities also file Annual Reports that review program performance and budget information from an annual perspective, and they provide forecasts for the upcoming year.

Program Funding

The changing program focus and uncertainties regarding future program administration contributed to an irregular funding and program approval process from 1998 to 2002, which served as a constraint on program operations. **Exhibit IV-5** (following page) provides an overlay of the approved programs and the various funding periods. Program years are provided at the top of the exhibit and the Commission directives are shown below the timeline.

In addition to establishing funding levels, the Commission regulates the amount of funds utilities may shift among programs. PGC funds must be expended in accordance with the plans approved by the Commission at the beginning of each program year. To ensure that funds are expended for the purposes intended, the Commission has restricted movement of appropriations according to: the program year in which such expenditures were authorized; the funding source from which PGC funds were derived (electric or gas); and, the program category (residential, non-residential, cross-cutting). **Exhibit IV-6** summarizes Commission rulings regarding fund shifting.

Exhibit IV-5: Program Years and Funding Cycles

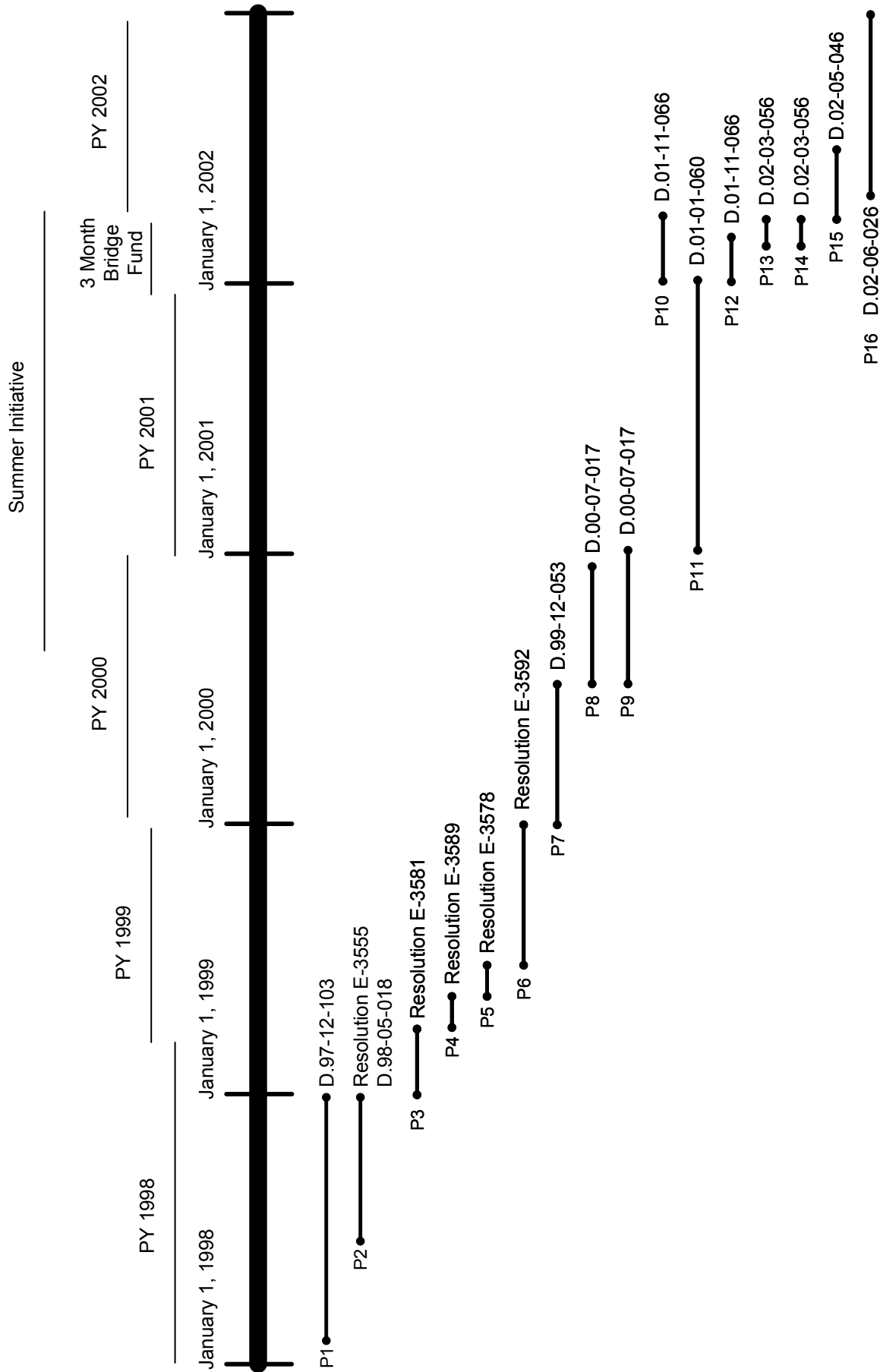


Exhibit IV-6: The Commission Established Fund Shifting Guidelines Throughout the Audit Period

1998 D. 97-12-103	1999 and 2000 Resolutions E-3578, E-3592, and E-3597 D. 00-07-017	2001 D. 01-01-060	2002 D. 02-03-056																																																						
<p>Interim administrators could shift authorized funds between programs as follows:</p> <ul style="list-style-type: none">Unallocated or unused funds for the Third Party Proposals and Initiatives may be allocated to other residential and small commercial programs;Authorized funds for Energy Management Services (EMS), General Information, Support and California Energy Commission (CEC) Data Collection may not be increased by transfer of funds from other programs except from the Third Party Proposals and Initiatives Programs as provided for above;Funds for Energy Efficiency Incentives and Integrated and Upstream Market Transformation programs may be increased up to 125% of their authorized amounts by transfer of funds from other programs; andTransfer of more than 10% of funds for any residential program to any nonresidential program under the conditions above must be approved by the Commission upon recommendation by the CBEE. <p>If utilities have unallocated funds within the approved nine-month budgets, they could increase nonresidential SPC programs up to CBEE recommended levels.</p>	<p>1999 R. E-3592 limited fund shifting in three ways for 1999:</p> <ul style="list-style-type: none">prohibit fund shifting across program administrative areas. Shifting across program areas was prohibited because it may cause cross-subsidization of major customer classes.abide by CBEE-recommended funding caps and minimum funding levels (floors) for selected program elements and intervention strategies.establish budget ranges for programs and maintain program expenditures within these ranges. <p>2000 The Commission approved utilities' proposals for use in PY 2000 but directed the utilities to provide further justification for allowing such fund shifting in PY 2001. Further, the utilities must ensure that the budgets, after funds are shifted, were still consistent with customer contributions by class and sub-class.</p> <table><tr><th>Program</th><th>1999</th><th>2000</th></tr><tr><td>Residential:</td><td>100%</td><td>105%</td></tr><tr><td>Heating & Cooling</td><td>85-115%</td><td>85-120%</td></tr><tr><td>Lighting</td><td>85-115%</td><td>85-120%</td></tr><tr><td>Appliances</td><td>85-115%</td><td>85-120%</td></tr><tr><td>Retrofit & Renovation</td><td>85-110%</td><td>85-120%</td></tr><tr><td>Nonresidential:</td><td>100%</td><td>100%</td></tr><tr><td>Large Comprehensive Retrofit</td><td>85-105%</td><td>85-115%</td></tr><tr><td>Small Comprehensive Retrofit</td><td>85-105%</td><td>85-115%</td></tr><tr><td>HVAC Turnover</td><td>85-115%</td><td>85-115%</td></tr><tr><td>Motor Turnover</td><td>85-115%</td><td>85-115%</td></tr><tr><td>Process</td><td>85-115%</td><td>85-115%</td></tr><tr><td>Remodeling/Renovation</td><td>85-115%</td><td>85-115%</td></tr><tr><td>New Construction:</td><td>100%</td><td>110%</td></tr><tr><td>Residential</td><td>85-115%</td><td>80-120%</td></tr><tr><td>Commercial</td><td>85-115%</td><td>80-120%</td></tr><tr><td>Industrial/Agricultural</td><td>85-115%</td><td>80-120%</td></tr><tr><td>Codes & Standards & Local Government Initiatives</td><td>85-115%</td><td>80-120%</td></tr></table>	Program	1999	2000	Residential:	100%	105%	Heating & Cooling	85-115%	85-120%	Lighting	85-115%	85-120%	Appliances	85-115%	85-120%	Retrofit & Renovation	85-110%	85-120%	Nonresidential:	100%	100%	Large Comprehensive Retrofit	85-105%	85-115%	Small Comprehensive Retrofit	85-105%	85-115%	HVAC Turnover	85-115%	85-115%	Motor Turnover	85-115%	85-115%	Process	85-115%	85-115%	Remodeling/Renovation	85-115%	85-115%	New Construction:	100%	110%	Residential	85-115%	80-120%	Commercial	85-115%	80-120%	Industrial/Agricultural	85-115%	80-120%	Codes & Standards & Local Government Initiatives	85-115%	80-120%	<p>In D. 01-01-060, the Commission gave the utility administrators flexibility to shift funds as needed to meet demand and maximize energy savings (for PY 2001 programs). Within a program area (e.g., residential programs) they were subject to the principles of equity and targeting underserved markets. The Commission required only that the utilities chronicle changes in program emphasis and funding in the April Quarterly Report.</p> <p>Utilities were not allowed to shift funds between program areas without prior Commission approval.</p> <ul style="list-style-type: none">Residential program budget was not to be combined with Residential New Construction.Nonresidential New Construction was not to be combined with Nonresidential budget.New Construction budget was to be maintained at 20% of utility's total program budget.	<p>D. 02-03-056 provided revised budget amounts and fund shifting guidelines. The Commission stated it would not allow IOUs to shift program funds across program categories except as set forth in the decision. Within the following categories, the IOUs could shift no more than 10% of one program's funds into another program in the same category. The IOU could only make the shift if and when it appeared that, after substantial efforts, the IOU would be unable to use the program funding for the intended purpose.</p> <p>Categories:</p> <ul style="list-style-type: none">Statewide Residential RetrofitStatewide Residential New ConstructionStatewide Nonresidential RetrofitStatewide Nonresidential New ConstructionStatewide Cross-Cutting (except Codes and Standards Advocacy).
Program	1999	2000																																																							
Residential:	100%	105%																																																							
Heating & Cooling	85-115%	85-120%																																																							
Lighting	85-115%	85-120%																																																							
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Codes & Standards & Local Government Initiatives	85-115%	80-120%																																																							

Source: D. 97-12-103, Resolutions E-3578, E-3592, and E-3597, D. 00-07-017, D. 01-01-060, D. 02-03-056.

4. Audit Procedures

The following procedures were performed in this audit area:

- Conducted interviews with utility energy efficiency personnel and reviewed appropriate documentation to assess the utility's systems and procedures for energy efficiency program accounting and cost tracking.
 - ⇒ Identified the utility's process for tracking budget vs. actual expenditures.
 - ⇒ Identified the utility's process for determining and tracking the status of committed funds.
- Determined whether the utility established a system of controls regarding the administration, accounting, expenditure and monitoring of energy efficiency program funds.
 - ⇒ Reviewed authorization levels for energy efficiency expenditures.
 - ⇒ Determined whether the utility established adequate processes and procedures regarding contractor costs.
 - ⇒ Determined whether the utility established adequate processes and procedures regarding the approval and payment of program expenditures (including on-site inspections and rebate application review).
- Determined whether the utility responded appropriately to any internal or external audit findings regarding management and control of its energy efficiency program funds.
- Completed oversight and accounting controls checklists.
- Determined whether the utility had an effective process to address energy efficiency funds management, including decision criteria to shift funds among programs.
 - ⇒ Reviewed the management process by which funds were allocated to programs and any subsequent adjustments were made to program funding levels.
 - ⇒ Conducted interviews with energy efficiency personnel and reviewed appropriate documentation to assess the utility's process for determining the need for, and approving shifting of funds between programs, and between program years.
 - ⇒ Obtained Commission authorized budgets. Determined whether program costs were over or under authorized budgets.
 - ⇒ Compared actual deployment of funds to authorized budget amounts. Identified any anomalies in cost data and explain.
 - ⇒ Reviewed Advice Letters and other utility documentation discussing rationale and purpose of fund shifting.

⇒ Identified fund expenditures or transfers which appear to have been initiated without the requisite approval of the Commission or exceeded the levels authorized by the Commission. Determined whether the fund shifting was in accordance to Commission guidelines or mandates.

- Assessed the utility's process to determine and track committed funds and associated payments. Determined the rationale the Company used to report commitments and investigated their disposition in subsequent years.
- For a selected sample of programs, performed substantive testing to ascertain whether the oversight, accounting and cost tracking controls functioned as intended during the audit period and whether they were in compliance with selected policy/program requirements. The list of programs examined at each utility is shown in **Exhibit IV-7**. A brief history of the programs and program rules are included in **Appendix B**.

Exhibit IV-7: Three to Five Programs Were Selected for Testing at Each Utility

Program	Type	Program Period	Utility			
			PG&E	SCE	SDG&E	SCG
Express Efficiency	Non-Res	1999 – 2002	X	X	X	X
Standard Performance Contract	Non-Res	1998 – 2002	X	X	X	
Residential Audits	Res	1998-2002	X	X	X	X
Savings by Design (SBD)	New Cons	2000 – 2002	X	X	X	X
Appliance Recycling	Res	1998-2002		X		
Residential Contractor Program-Single Family (RCP-SF)	Res	2000-2001	X			

Source: blueCONSULTING Work Plan.

- ⇒ Obtained and reviewed program policies, procedures and implementation practices as well as any reports documenting the results of the program.
- ⇒ Obtained and reviewed the detailed reports used by the program manager for managing the design, implementation and reporting of the program.

5. Sampling Techniques

As discussed above, three to five programs were selected for detailed testing at each utility. Sample program files or individual transactions may also have been selected for review.

C. PG&E

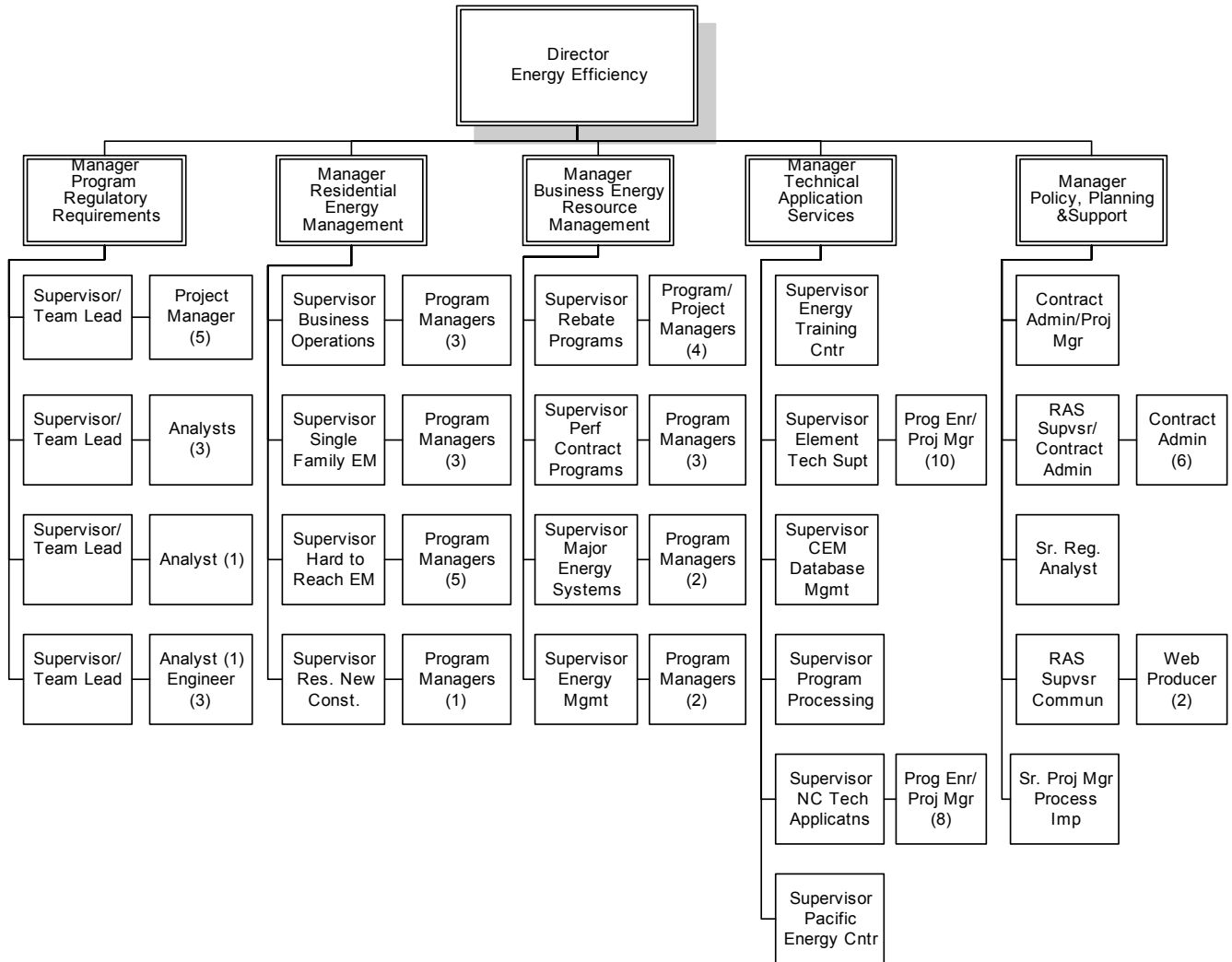
1. Background

PG&E's Customer Energy Management Department (CEM) has responsibility for administering PG&E's PGC funded energy efficiency programs. While there were some changes in division titles and responsibilities during the audit period, the general structure and responsibilities of the CEM organization has remained the same. In 2002, the CEM organization consisted of five divisions.

- **Program Regulatory Requirements.** This division is responsible for preparing and submitting the energy efficiency annual budget and for preparing the monthly, quarterly and annual reports of PGC revenues and energy efficiency program expenditures. This division also supports PG&E's efforts in responding to various inquiries and audits of the Commission.
- **Policy, Planning and Support.** This division has responsibility for contract administration, regulatory analysis, business process improvement efforts and for maintaining the Customer Energy Efficiency Department's portion of PG&E's website.
- **Technical Application Services.** This division is responsible for implementing various training programs related to energy efficiency, for maintaining the Department's computer-based information systems and for facilities operations.
- **Business Energy Management.** This division is responsible for designing and delivering programs that promote energy efficiency within the commercial sectors, including:
 - ⇒ Express Efficiency (program years 1998 through 2002)
 - ⇒ Standard Performance Contracts (program years 1998 through 2002)
 - ⇒ Savings by Design (program years 1999 through 2002)
 - ⇒ Non-Residential New Construction (program years 1998 through 2002)
 - ⇒ Local Government (program years 1999 through 2002).
- **Residential Energy Management.** This division has responsibility for designing and delivering energy efficiency programs promoting the retrofit and renovation of single family and multi-family dwellings as well as schools. Programs administered by the Residential Energy Management Division include:
 - ⇒ Energy Star Homes
 - ⇒ Residential Retrofit and Renovations
 - ⇒ Linked Heating, Ventilation and Air Conditioning (HVAC) Financial Incentives.

CEM's scope of responsibility also includes areas not included within the scope of this review, including CARE and PG&E's Clean Air Transportation Program. PG&E's energy efficiency organization is shown below.

Exhibit IV-8: PG&E's Energy Efficiency Organization



In 2002, CEM had over 200 positions as shown in **Exhibit IV-9**.

Exhibit IV-9: In January 2002 PG&E's CEM Department Staffing Exceeded 200 Persons

Division	Position Count
Office of the Director	3
Program Regulatory Requirements	19
Policy, Planning and Support	19
Technical Application Services	46
Business Energy Resource Management	40
Residential Retrofit & Renovation	23
Clean Air Transportation	20
Low Income Energy Management (Including CARE)	40
Total	210

Source: CEM Organization Charts (Document Response PGE-JJ-002.8); blueCONSULTING analysis.

PG&E used contractors to assist in supporting various aspects of the energy efficiency program during the audit period. During the five years ended December 31, 2002, PG&E expended \$171 million for such services. These \$171 million in expenditures were distributed among 709 separate vendors and 1,016 individual contracts. The following table provides a year-by-year summary of expenditures for contract services:

**Exhibit IV-10: PGC-Funded Expenditures for Contract Services
1998 through 2002 exceeded \$170 million
(Dollars in Thousands)**

Year	Amount Expended
1998	\$22,969
1999	32,922
2000	65,607
2001	32,035
2002	17,197
Total	\$170,730

Source: PG&E Energy Efficiency Vendor Payments (Document Response PGE JJ 002.7); blueCONSULTING Analysis.

Exhibit IV-11 provides a stratification of vendor payments according to dollar amount paid during the five-year period.

**Exhibit IV-11: Breakdown of PG&E PGC-Funded Expenditures for Contract Services by Dollar Amount Paid
(Dollars in Thousands)**

Amount	Value of Contracts Awarded	Number of Contracts Awarded	Percent of Total Contract Value
Less than \$100,000	\$11,550	768	7%
\$100,000 to \$500,000	46,801	185	27%
\$500,000 to \$1,000,000	21,253	31	12%
\$1,000,000 to \$5,000,000	52,454	29	31%
Above \$5,000,000	38,802	3	23%
Total	\$170,863	1,016	100%

Source: PG&E Energy Efficiency Vendor Payments (Document Response PGE JJ 002.7); blueCONSULTING Analysis.

The following is a description of three principal contractors used by PG&E during the audit timeframe:

- **Stafo Inc** – During program years 1998 through 2002, PG&E contracted with Stafo to provide clerical and administrative support. The scope of work performed by Stafo included rebate application processing, California Home Energy Efficiency Rating Service (CHEERS) seminar attendance coordination, Energenius marketing and program material distribution, customer satisfaction survey processing, policy and procedures support and on-line conversion support. From 1998 through 2002, PG&E paid Stafo \$7.1 million.
- **Richard Heath & Associates** – Richard Heath & Associates assisted PG&E in processing rebates for energy efficient lighting fixtures. During program years 1998 through 2002, Richard Heath was paid \$23 million, including reimbursements for rebates paid directly to customers on behalf of PG&E.
- **Xenergy** – PG&E used Xenergy to assist in processing mail-in home energy audits. Xenergy's responsibilities included preparing and distributing the survey documents as well as processing and analyzing the results. From program years 1998 through 2002, Xenergy was paid a total of \$9 million for its services.

Tracking of Commitments

PG&E maintains an accounting of commitments resulting from contracts executed with vendors, shareholder incentives earned by the utility but not yet released by the Commission, and for customer incentives that will become due and payable upon completion of specified program requirements on the part of the customer.

As of September 30, 2003, PG&E had recorded commitments of \$63 million, which remained outstanding from PY 1998 to 2002 programs. Of this amount, \$27 million was for shareholder incentives PG&E had recorded as earned but not yet released by the Commission, while the remaining \$36 million was for contracts and customer incentives.

PG&E accounts for commitments on a perpetual basis, i.e. as agreements are entered into, funds are reserved against the available appropriations in an amount equal to the expected value of the obligation. As payments are made, PG&E reduces its reserves for commitments by the amount of funds paid.

PG&E's tabulation of outstanding commitments at any given time represents an estimate of the amount of funds to be paid out pursuant to the agreement with a vendor or a customer. As much as two years may elapse between when a commitment is made and when it becomes due and payable. Hence, it is incumbent upon the utility to make adjustments to its calculation of outstanding commitments, based upon the actual performance of customers in incentive-based programs or based upon changes in PG&E's requirements of its vendors.

The need to liquidate commitments subsequent to the end of a program year makes it difficult to perform a reconciliation of budgeted and actual expenditures until it becomes time to close out a program. For example, a 2002 PG&E internal audit report indicated that the Customer Energy Management Department appeared to have overspent its authorization of PGC funds by \$5.7 million in PY 2001. CEM responded to Internal Audit's finding by indicating that it expected to liquidate \$5.7 million of program year 2001 commitments. As a result CEM expressed confidence that, once a final accounting of PY 2001 expenses was made, Program Year 2001 would be within budget.

2. Summary of Adjustments

None.

3. Summary of Conclusions

Exhibit IV-12 provides a summary of the adequacy of PG&E's Accounting Oversight and Management Issues, along with appropriate comments, during the audit period.

Exhibit IV-12: Accounting Oversight and Management Summary Checklist for PG&E

Control Area	Adequate? (Yes or No)	Comments	Recommendation
Corporate Control Environment			
1. Management organization provides adequate direction and oversight. There is effective communication to address problems and avoid mistakes.	Yes		
2. Executive management is committed to internal control and regulatory compliance and related compliance programs are adequate.	Yes		
3. Organization design and staff contributes to appropriate control environment. <ul style="list-style-type: none"> Separation of duties is adequate. Staff is knowledgeable and adequately trained. The utility ensures staff continuity. 	Yes		
4. The internal audit function of the PGC program is adequate. <ul style="list-style-type: none"> Audits are conducted by qualified personnel. Audit plans incorporate periodic reviews of major systems, tests of regulatory compliance, and program specific audits. They provide for appropriate follow-up. Independent audits are performed in accordance with regulatory requirements. 	Yes		

Control Area	Adequate? (Yes or No)	Comments	Recommendation
<ul style="list-style-type: none"> Management initiates corrective action on findings. 			
Program Design and Funding			
5. The utility's PGC personnel participate in statewide workshops and contribute to program design and reporting requirements.	Yes		
6. The utility has developed an appropriate process for timely identification of changes in regulatory requirements and incorporating these requirements into its energy efficiency programs. Commission requirements are adequately communicated to project managers, who are held accountable for compliance with Commission requirements.	Yes		
7. Procedures are in place to ensure program selection; budgeting and funding are performed within Commission guidelines.	Yes	The use of PY 2000 agreements for Savings by Design applications which were received in 1999 may constitute fund shifting.	The Commission should determine whether use of PY 2000 agreements for Savings by Design applications which were received in 1999 constitutes fund shifting.
Program Oversight and Management			
8. Management performs effective oversight of PGC programs. Management reviews actual performance versus budgets and program goals.	Yes		
9. The utility has established appropriate procedures for determining committed funds, tracking expenditures against commitments and releasing commitments.	No	Reconciliation of outstanding commitments for PY 98-01 was not performed until 2002. There are indications that commitments are overstated for the saving-by-design program.	PG&E should review its customer files related to commitments to identify projects which have been inactive for an inordinate length of time and determine which these should be excluded from reported commitments.
10. PGC procurement policies are appropriate and consistent with corporate procurement policies. <ul style="list-style-type: none"> There is a formal decision-making process for outsourcing vs. in-house work. There is a competitive contractor selection process. Contractor/vendor relationships are evaluated periodically. There is compliance with purchase order approval limits. 	Yes		
11. Contractor oversight and monitoring is adequate. <ul style="list-style-type: none"> The Energy Efficiency group has established procedures to monitor and control contractor activities. Work performed by contractors is monitored and verified. Contractor/vendor invoices are reviewed to ensure accuracy. 	Yes		
12. On-site inspections are performed as appropriate.	Yes		
Accounting and Cost Tracking (Control Activities)			
13. PGC program revenue and disbursements systems are integrated with the financial accounting systems and are adequately designed and documented.	Yes		

Control Area	Adequate? (Yes or No)	Comments	Recommendation
14. Program managers receive monthly budget vs. actual cost reports. Reviews are conducted to ensure program charges are appropriate, and variances are reviewed and resolved.	Partial	Process to track the status of budgets and expenditures was fragmented and ad-hoc in nature during 1998-2000. Financial reporting capabilities improved following the Commission establishment of quarterly reporting requirements in 2000.	
15. The utility has established appropriate checks and quality control procedures regarding payment of incentives.	Yes		
16. Authorization levels for expenditure approval are appropriate.	Yes		
17. There is adequate rebate application review and approval and separation of duties.	Yes		
Compliance (Program Rules)			
18. Program reporting is based upon information contained in the accounting records and is in compliance with Commission requirements.	No	There are SPC projects which are open beyond the program close date and some Savings by Design projects which might not meet project eligibility criteria.	PG&E should tighten its administrative controls over the Savings by Design and SPC programs.
19. Participant eligibility for a program is determined.	Yes		

4. Conclusions

Corporate Control Environment

C1. PG&E has an adequate internal audit program that makes a positive contribution to the design and implementation of PGC program systems and internal controls.

- PG&E's Internal Audit organization conducts annual audits of CEM. The primary purpose of the audits is to determine whether the expenditures charged to energy efficiency are valid.
- Areas examined by internal audit during the audit period include:
 - ⇒ Overhead costs applied to CEE programs (2001)
 - ⇒ Year-End Accruals of Expenditures and Commitments (2000)
 - ⇒ Labor, Entertainment, and Promotional Charges (1998)
 - ⇒ Contract Costs (1998 and 1999)
 - ⇒ Employee Expenses (1999)
 - ⇒ Process for budgeting and monitoring program expenditures (2000 and 2001).

Program Design and Funding

C2. During program years 1998 through 2000, PG&E's process to track the status of budgets and expenditures throughout the year was fragmented and ad-hoc in nature. PG&E's financial reporting capabilities improved following the Commission's establishment of quarterly reporting requirements in 2000.

- D. 00-07-017, effective July 2000, directed each utility to file quarterly expenditure reports. Such reports were to be comprehensive in nature and were to be prepared in accordance with the Reporting Requirements Manual 2.
- Prior to being directed to produce quarterly financial reports, PG&E had not established an interim financial reporting capability that was consistent throughout the organization. Although some program managers attempted to monitor the status of expenditures, such reporting was ad-hoc in nature and was not performed consistently throughout the organization. As a result, PG&E was unable to provide us with a satisfactory level of assurance that program management staff was kept current on the status of budgets and expenditures throughout the year in the period 1998 through 2000.
- PG&E did have current, comprehensive and reliable information regarding the status of program budgets and expenditures during 2001 and 2002, following the implementation of the Commission's directive regarding quarterly reporting.

C3. PG&E has established adequate controls to ensure that funds are not shifted between programs or program years without proper authorization.

- Fund shifting constitutes the expenditure of funds originally intended for one program category, funding source or program area to another. Although fund shifting can occur by increasing appropriations of one program area, program year or funding source with an offsetting reduction in another, funds can also be *effectively* shifted through: (1) the inappropriate classification of program expenditures; or, (2) spending funds upon a program area that exceed the amounts appropriated by the Commission. Therefore it is incumbent upon a utility to ensure that program expenditures are properly classified according to program area and to monitor the status of expenditures to ensure that appropriations are not exceeded.
- PG&E uses job cost accounting to accumulate energy efficiency program costs. This method ensures that expenditures can be classified, tabulated and summarized according to each of the following categories or combinations of categories:
 - ⇒ Program year
 - ⇒ Funding source (gas or electric)
 - ⇒ Program area (residential, non-residential etc.).
- PG&E's chart of accounts has been structured to conform to the Commission's reporting requirements manual.

- The annual and quarterly reports submitted to the Commission serve as the basis for documenting any changes in program budgets that have occurred during the year as well as the authority derived for making any budgetary adjustments.
- Prior to closing out a particular program, PG&E performs a final accounting of program payments. In the event unexpended funds remain, PG&E requests that such available appropriations be transferred to another program year as part of its annual program filing.
- On a monthly basis PG&E's program managers obtain an itemized listing of expenditures charged to the programs for which they are responsible. Program managers are responsible for reviewing these monthly expenditure reports to verify that the expenditures have been properly classified.

Program Oversight and Management

C4. PG&E has established a formal goal setting and performance evaluation process for the CEM program managers that fosters accountability.

- Commission requirements and business objectives are communicated to PG&E staff through PG&E's annual performance management process. blueCONSULTING's review of sample employee evaluations and evaluation templates for CEM confirmed that the performance management process provides project managers with sufficient guidance on both the expectations of the Commission and with sufficient feedback as to whether such expectations were met.
- Energy efficiency program managers have responsibility for reviewing monthly program expenditure reports and verifying that program charges are properly classified.
- The CEM Director conducts monthly meetings with each program manager regarding the status of each program.

C5. PG&E's policies and procedures over the contractor selection process provide a reasonable level of assurance that such contractors are selected in accordance with sound business practices.

- Some of the primary justifications for using a contractor rather than in-house staff were the vendor's ability to provide services in a cost effective manner and to enable the utility to be flexible in response to changes in the priorities, strategies and configuration of the energy efficiency programs. Examples of PG&E's need to remain flexible include major changes in program strategy (such as the relative emphasis on long-term versus immediate energy conservation efforts) and uncertainty regarding PG&E's future role in administering energy efficiency programs.
- PG&E has established a utility-wide standard practice regarding the selection of contractors (USP 20) and has implemented a formal training program to ensure that contracts are developed and awarded in accordance with PG&E's stated policy.

- To ensure that contracts are awarded in accordance with sound business practices, USP 20 requires:
 - ⇒ Contracts in excess of \$25,000 should be subject to a competitive bidding process, unless the award on a sole source basis can be justified.
 - ⇒ Contracts in excess of \$100,000 must be approved by a corporate vice president.
 - ⇒ Contracts renewals or contract increases in excess of \$25,000 are also subject to the competitive bidding or business justification requirements of USP 20.
- **Exhibit IV-13** provides the results of our examination of PG&E's vendor selection practices. As indicated in the table, PG&E was unable to determine the basis for vendor selection in 19 of the 295 contracts in excess of \$25,000 that were awarded during program years 1998 through 2002.
 - ⇒ All but 3 of the 19 contracts which lacked vendor selection information were initiated in the 1995-1999 period. In 2000, CEM instituted a number of contract process improvements, including the development of a contracts tracking database which was completed in early 2001. PG&E is now able to monitor and track the contract formation process, including the vendor selection process, using this database.

Exhibit IV-13: PG&E was Unable to Determine the Basis for Selection of 19 out of 295 Vendors Awarded Contracts Greater than \$25,000 from 1998 to 2002
(Dollars in Thousands)

Basis for Vendor Selection	Number of Contracts Awarded	Total Dollar Value of Contracts	Percent of Total Dollar Value
Competitive Bid	211	\$110,450	68.3%
Sole Source	108	47,389	29.3%
Unable to Determine	18	3,910	2.4%
Total	295	\$143,911	100%

Source: PG&E Energy Efficiency Vendor Payments (Document Response PGE JJ 002.7); blueCONSULTING Analysis.

C6. PG&E has adequate processes to monitor and control contractor activities and to verify work performed by contractors.

- Responsibility for monitoring and controlling contractor activities rests with the program manager. The monitoring and control of vendors is conducted in conjunction with the invoice payment process. Program managers are expected to verify that the work was performed satisfactorily prior to authorizing payment.
- Based upon a review of 10 contracts representing \$38 million in expenditures, we determined that PG&E adheres to its stated practice of incorporating contract terms and conditions so as to enable PG&E to hold its vendors accountable for their performance.

- PG&E routinely reviews the work performed by its SPC Technical Consultants. Tasks performed by the Technical Consultants include:
 - ⇒ Review of customer applications for completeness, compliance with program guidelines, accuracy of energy calculations and computation of expected incentive amounts.
 - ⇒ Recommendations on acceptance, modification, suspension or rejection of a project or a project submittal.
 - ⇒ Inspecting project sites to verify the validity of project applications, installation reports, and energy savings results.
- blueCONSULTING's examination of the invoices and management reports submitted by Xenergy Corporation for processing residential energy surveys, confirmed that PG&E had obtained a satisfactory level of documentation supporting the vendor billings.

C7. blueCONSULTING found no indication that PG&E shifted funds without proper authorization. However, as discussed further in Conclusion C12, blueCONSULTING identified the possibility that PG&E incorrectly classified \$1.4 million in Savings by Design (SBD) incentives, resulting in the effective shifting of program year 1999 funds to program year 2000.

- Pursuant to D. 00-17-007 dated July 6, 2000 and Resolution G-3323 dated October 10, 2001, PG&E received authorization to transfer pre-1998 energy efficiency funds as follows:
 - ⇒ \$1.0 million to PY 2001 Small Standard Performance Contract;
 - ⇒ \$1.0 millions to PY 2001 Energy Management Services;
 - ⇒ \$1.5 million to PY 2001 HVAC;
 - ⇒ \$0.7 million to PY 2000 Summer Initiative; and,
 - ⇒ \$4.5 million to PY 2000 Summer Initiative.
- According to PG&E's response to our data requests, there were no transfers of funding between energy efficiency programs beyond those authorized by D. 00-017-007 or Resolution G-3323. However, as shown in **Exhibit IV-14**, blueCONSULTING's analysis of PY 2002 budget adjustments identified several instances of fund shifting which were either authorized by the Commission or which did not require authorization.

**Exhibit IV-14: The Commission Authorized PG&E to Shift Funds in PY 2002
(Dollars in Thousands)**

Funds Shifted From:	Funds Shifted To:				
	Appliance Recycling	Single Family Residential EE	Single Family Residential New Construction	Standard Performance Contract	Total
Multifamily Residential Energy Efficiency	\$300	\$400			\$700
Home Energy Survey	200				200
Residential Lighting	70				70
Education and Training	50				50
Multifamily residential new construction	200		500		700
First Quarter 2002 Funds		600			600
Express Efficiency				646	646
Non Residential Energy Audits				200	200
Total	\$820	\$1,000	\$500	\$846	\$3,166
Authorization	ALJ Ruling 1/10/03	ALJ Ruling 3/18/03 and 8/02 Advice Letter	ALJ Ruling 3/18/03	None. Amount is less than 10% of original program budgets	

Source: 2002 Quarterly Reports (Document Response PGE-IDR-1.6).

- Based upon a comparison of authorized versus recorded expenditures by funding source and program area, no additional fund shifts were initiated or needed during Program Years 1998 through 2002.
- As discussed further in Conclusion C12, blueCONSULTING's review of SBD program files found that the use of PY 2000 agreements for SBD applications which were received in 1999 may constitute fund shifting, depending on the interpretation of program rules.

C8. PG&E did not perform a reconciliation of outstanding commitments for program years 1998 through 2001 until January 2002.

- In January 2002, the CEM financial management team performed an accounting of commitments that had remained outstanding from previous program years. This was the first attempt at a comprehensive accounting for such commitments since 1998.
 - ⇒ The commitments for Program Years 2001 and 2002 were derived from the Energy Efficiency Programs Annual Report submitted in the AEAP.
 - ⇒ Since the commitments for PY 1998, 1999, and 2000 were not reconciled prior to 2002, PG&E's financial management team obtained the most current and outstanding commitments information as of December 31, 2001, from the Program Managers.
- In April, July and August of 2003, the financial management team reduced its tabulation of outstanding commitments by a total of \$12.8 million. The amount of commitment adjustments were nearly equivalent to the \$13.1 million in incentives paid for the first nine months of Program Year 2002.

- In September 2003, PG&E updated its commitment analysis to account for payments on and adjustments to commitments that occurred subsequent to December 2002.
- The Financial Management Team currently generates the Commitment Reconciliation Report on a monthly basis. The actual monthly expenditures related to prior year programs are recorded in this report according to program year and program area. The Program Managers review the data reflected in this report on a monthly basis and provide updated information regarding remaining commitments. All adjustments to prior year program commitments are also reported in the Monthly Accounting Report submitted to the Commission.

C9. There are indications that commitments are overstated for the Savings by Design program.

- An analysis of 34 randomly selected Savings by Design Program files indicates that 14 projects (or 41 percent of those selected) contained no indication of any contact with the customer during the past 12 months. Additionally, nine of these of these 14 files contained no evidence of contact with the customer during the past 24 months.
 - PG&E has no standards regarding the frequency of SBD customer contact.
- ⇒ According to PG&E, overall time frames for the development and construction of nonresidential construction projects vary from 3.5 years for small, simple projects to more than 7 years for complex or institutional projects. Because of these long time frames, customers are charged with notifying PG&E of project completion.ⁱ Under current program rules, this period may be as long as four years from commitment of funds to project completion with additional time for site verification, update of calculations for as-built conditions, and final check cut. Once a design is finalized, energy efficiency measures incorporated into construction documents, and the project commitment has been made to the customer, additional contact may not be necessary until project completion.
- ⇒ Each SBD project manager is charged with determining the appropriate level of customer/project involvement for the SBD projects he or she manages. Building/Process owners or owner's representatives may receive routine calls from SBD field project managers that are not documented in project master files maintained at PG&E's General Office.
- ⇒ As a double-check on notification from customers, estimated project completion dates are recorded in the Savings by Design database. Each month, the list of projects whose completion dates have passed is prepared for the purpose of initiating customer contact, determining project status, and scheduling post construction verifications.

ⁱ 1999 Contract/2000,2001,2002 Project Applications all state "During the final stage of construction, Building Owner will notify Utility of the projected construction completion date so that the Utility can arrange to inspect the building as required for payment of incentives to Building Owner."

Accounting and Cost Tracking

C10. PG&E's controls over rebate and incentive processing provide a reasonable level of assurance that such payments are made in accordance with applicable program requirements. However, such controls have not always been effective in preventing questionable expenditures.

- The CEM organizational structure provides an adequate degree of separation between the payment authorization and payment processing functions. Business and residential energy management program staff are responsible for authorizing payments for customer incentives and for contract services payment processing. The Technical Application Services Division is responsible for verifying that the payments authorized conform to the applicable program and/or contractual requirements prior to releasing funds.
- For each of the incentive programs reviewed as part of blueCONSULTING's detailed testing of transactions (Standard Performance Contracts, Express Efficiency, Savings by Design and Residential Contractor Program) PG&E provided payment processing staff with a sufficient degree of documentation (including payment processing procedural manuals and checklists) to ensure that payment processing staff were knowledgeable of the conditions necessary for incentive payment approval.
- blueCONSULTING sampled 13 residential contractor program files. Each of the files reviewed contained evidence that the PG&E's customer incentive payment processing staff had verified that the customer and contractor had met all of the conditions necessary. However, blueCONSULTING identified two instances in which the payment processing staff overlooked the fact that, contrary to the requirements of the program, the contractor failed to credit the customer for the partial payment the contractor had received directly from PG&E. The amount of the resulting contractor overpayment for these two files was \$1,000.
- blueCONSULTING's review of sample SPC and Express Efficiency files identified no deficiencies.
- PG&E's internal auditors conducted a review of the Richard Heath & Associates contract for administering selected appliance and lighting fixture rebate programs. The internal auditors' findings were limited to improving the level of synchronization of customer and contractor databases and increasing the amount of security over checks that had been issued to customers but subsequently returned. In follow-up reviews Internal Audit noted that both reportable conditions had been rectified.
- The results of blueCONSULTING's detailed testing of incentive programs are discussed in Chapter V.

Compliance

C11. PG&E's systems and procedures used to prepare energy efficiency program budgets and to report on the status of program expenditures have been designed and maintained in a manner that conforms to the requirements of the Commission.

- At the beginning of each program year, PG&E submits a proposed operating plan and budget for PGC funded programs and activities. This proposal is organized according to major program area and contains the following elements:
 - ⇒ A description of the objectives;
 - ⇒ An estimate of program costs according to expenditure category, program area, program and program element; and,
 - ⇒ A statement of expected outcomes.
- Upon completion of each program year, PG&E files an annual report with the Commission that includes a budget versus actual comparison of program expenditures organized according to program area, program and program element. This annual report also compares expected with actual outcomes and is used as the basis for determining the amount of shareholder incentives that PG&E is entitled to receive based upon the achievements documented.

C12. blueCONSULTING's review of the Residential Contractor Program and Home Energy Surveys indicate that PG&E has effective management and oversight of these programs.

C13. blueCONSULTING's review of Savings by Design files identified possible instances of non-compliance in the enforcement of commitment terms for Program Year 1999 and in project eligibility for Program Year 2001. blueCONSULTING identified other anomalies in the PY 1998 program that may constitute fund shifting. (Incentives for these projects totaled \$1.4 million.)

1999

- The 1999 Savings by Design program was not a statewide program. PG&E's compliance with the program rules as outlined in its Policies and Procedures is summarized in **Exhibit IV-15.**

Exhibit IV-15: PG&E Complied with Most of its 1999 Savings by Design Policies and Procedures

Item	Policy	Complied						
Customer Eligibility	Must be located in utility service territory and subject to PGC.	✓						
Project Eligibility	<ul style="list-style-type: none">Projects must be in the programming or schematic design phase, or still at a point where design changes are feasible.New, nonresidential Title 24 occupancies. Non-Title 24 occupancies and tenant improvement and gut rehabilitations may also be eligible, but must be approved by the Program Manager.	✓						
Program Term	First-come, first-served basis. PG&E will accept applications until December 31, 1999.	✓						
Commitment Term	<ul style="list-style-type: none">PG&E will issue a commitment letter and program contract, indicating that the project has been accepted. The incentive agreement is valid for two years from the date of the commitment letter.If project's completion is delayed beyond final date, Agreement is voided, but project may be eligible under the program guidelines in effect at that time.	No [Note 1]						
Rebate Limit (as stated in PY 1999 Agreements)								
Whole Building Approach	Owner Incentives \$250,000 per freestanding building or individual meter. Design Team Incentives \$50,000 per project (and apply only once per design effort).	✓						
Systems Approach	Owner incentives \$100,000 for a single project.	✓						
Incentive Rate								
Whole Building Approach	<table><tr><td><u>Owner</u></td><td><u>Design Team</u></td></tr><tr><td>\$.06 - \$.18/kWh</td><td>\$.03 - \$.06/kWh</td></tr><tr><td></td><td>\$.15 - \$.27/therm</td></tr></table>	<u>Owner</u>	<u>Design Team</u>	\$.06 - \$.18/kWh	\$.03 - \$.06/kWh		\$.15 - \$.27/therm	✓
<u>Owner</u>	<u>Design Team</u>							
\$.06 - \$.18/kWh	\$.03 - \$.06/kWh							
	\$.15 - \$.27/therm							
Systems Approach	\$.06 per kWh							
Entry Level (% beyond T24)								
Whole Building Approach	Owner Incentives 10%. Design Team Incentives 15%.	✓						
Systems Approach	Various							

✓ = Compliance No= Non-Compliance

Note 1: PG&E did not comply with the commitment term of its PY 1999 SBD Policies and Procedures which state that incentive agreement is valid for two years from the date of the commitment letter. In contrast, the PY 1999 Agreement had a termination date of December 31, 2001, and the PY 2000 Agreement had a termination of three years after the Agreement was signed.

Source: PG&E 1999 Savings By Design Policies and Procedures (Document Request PGE-JJ-007.1); 1999 Savings by Design Agreements (Document Request PGE-JJ-016).

- According to the program policies and procedures, the process for the commitment and payment of PG&E's 1999 Savings by Design program funds was as follows:
 - ⇒ PG&E shall commit funds based on final design documentation prepared as a result of design assistance or design analysis services.
 - ⇒ All applicants must sign and return an application to PG&E.
 - ⇒ PG&E will issue a commitment letter and program contract, indicating that the project has been accepted in the program.

- ⇒ Commitment is official upon customer receipt of the commitment letter.
- ⇒ Program contracts must be signed and returned to PG&E prior to incentive payment processing.
- ⇒ The incentive agreement is valid for two years from the date of the commitment letter.
- For PY 1999 PG&E executed 34 agreement representing \$1.4 million.
- All 1999 agreements were received after 1999. 20 of the 34 PY 1999 projects had agreements that were signed after project completion; nine of these agreements were signed in 2002, over a year after the projects were completed. There is no specific requirement that the contract be signed before the completion of the project.
 - ⇒ There are no time limits on when payments are to be made. According to the PY 1999 Policies and Procedures, the program contracts must be signed and returned to PG&E prior to payment of incentives.
 - ⇒ PG&E intended that the contract be signed in a timely manner. PG&E's PY 1999 acceptance letter to the building owner indicates a requirement to return the contract within 90 days, and that funds would not be committed beyond 2001.
- 31 of the 34 PY 1999 Savings by Design incentive payments (representing \$1.4 million) were executed using PY 2000 agreements, rather than PY 1999 agreements. The potential effect of this is an increase in the allowed duration of the contract; however all projects were completed by December 31, 2001, the termination date of the 1999 Agreement.
 - ⇒ A comparison of key elements of the SBD Building Owners agreements is shown in **Exhibit IV-16**.

Exhibit IV-16: The Termination Date of the PY 1999 and PY 2000 SBD Building Owners Agreements Differs

Agreement Item	PY 1999	PY 2000
Termination Date	12/31/2001	3 Years after the Agreement is signed
Contract Sections	Payment Conditions Events of Default Insurance	These agreement sections are not include in the PY 2000 Agreement

Source: PY 1999 SBD Project Documents (Document Response PGE-JJ-017).

- blueCONSULTING initially questioned these 31 projects as a result of a concern about potential fund shifting. The concern arose because of the use of PY 2000 agreements for programs charged to PY 1999 and because the contracts were not signed and returned to

PG&E within 90 days of customer receipt of the commitment letter. Whether or not this is fund shifting is dependent on what event triggers the encumbrance of funds against a program year. There is a conflict between PG&E's policies and procedures, as cited in its manual, and its rules as stated in the agreement letter sent to customers.

⇒ According to PG&E's agreement letter,

...Encumbrance of these funds is contingent on Pacific Gas and Electric Company receipt of the signed program contract within 90 days of this commitment letter.

⇒ The contracts were not returned within 90 days, which would imply that these funds should not have been committed.

⇒ According to PG&E, the requirement cited in the letter was not a program requirement, but an attempt to get the customers to return the contract. PG&E reserved the right to release funds if the customer did not subsequently fulfill his obligation to sign the contract within 60 days. The option to release funds was at the utility's discretion. PG&E did not exercise this right for any project that provided documentation sufficient to complete project analysis and have funds committed by year-end, 1999.

⇒ According to the SBD policies and procedures, PG&E will "issue a commitment letter and program contract, indicating that the project has been accepted to participate in the program. Commitment is official upon customer receipt of the commitment letter." Funds were encumbered when the agreement letter was sent, not the year of the contract, or when the contract was signed.

- The use of PY 2000 agreements to execute \$1.4 million in incentive payments for Savings by Design applications received in 1999 might also be seen as fund shifting from PY 1999 to PY 2000. PG&E's position is that the use of PY 2000 agreements did not constitute fund shifting as all projects were administered per the program in effect during the year funds were originally committed. Funds were encumbered against the program year based on the agreement letter, rather than the signed contract. Our review indicates the letters were sent in 1999; however we do not have copies of the letters to independently verify this.

⇒ According to PG&E, the PY 2000 agreements were used because the three-page PY 2000 agreements were simpler than the 14 page PY 1999 contracts.

- In 1999, Savings by Design program participants undertook a two-step process to be included in the program. First, the participant signed a program application. The customer was subsequently to provide a signed contract acknowledging agreement to PG&E/Commission standard terms and conditions.
- In 2000, the application and contract were combined and the process simplified to one step. The information, terms, and conditions listed in the application for 2000 program participation replaced both the 1999 application and contract. As such,

1999 program participants who had not yet signed the contract were allowed to sign the condensed program year 2000 application in lieu of signing the 1999 contract. The customers were informed that by doing so, they had met their 1999 program obligation to become signatory to standard PG&E/Commission terms and conditions.

2000-2002

- The statewide rules for the PY 2000 – 2002 SBD programs are provided in Appendix B. Although SBD was a statewide program in PY 2000, it appears that SCE and PG&E used different rebate limits for the building owners' incentives. According to PG&E's PY 2000 SBD brochure, the whole building approach limit was \$250,000; while the systems approach limit was \$100,000. SCE used \$150,000 and \$75,000 respectively. PG&E complied with its maximum incentive limit.
- The results of blueCONSULTING's review of PG&E's compliance with the statewide Savings by Design PY 2000 to PY 2002 program rules are summarized below.

**Exhibit IV-17: There Are Two Possible Instances of PG&E's Non-Compliance with Savings by Design Program Rules
2000-2002**

	2000	2001	2002
Customer Eligibility	✓	✓	✓
Project Eligibility	✓	Possible non-compliance. See discussion below.	✓
Commitment Term	✓	✓	✓
Customer Eligibility	✓	✓	✓
Rebated Amount	See discussion above. PG&E's rebate maximum differed from other utilities.	✓	✓
Incentive Rate	✓	✓	✓
Entry Level Threshold (% beyond Title 24)	✓	✓	✓

✓ = Compliance No= Non-Compliance

Source: blueCONSULTING Analysis.

- blueCONSULTING's review found that three of the thirty projects sampled for PY 2000 – 2002 did not have sufficient evidence of PG&E's involvement in the project design prior to the execution of SBD agreement. In other words, these projects may represent free riders.

⇒ These three projects represent 44 percent of the \$234,294 dollars sampled for PY 2000 to PY 2002. All three were PY 2001 projects.

- ⇒ These projects were flagged due to a compressed schedule of two to six months between the date the application was received, and the project completion date.
- ⇒ According to PG&E, these projects are legitimate SBD projects as the SBD program also provides for later involvement to capture opportunities that would otherwise be lost. It explains the payment of SBD incentives to these projects as follows:

While program intent is to influence projects during early conceptual design phase in order to maximize energy efficiency gains, the program also provides for later involvement to capture opportunities that would otherwise be lost. In fact, the entire Systems Approach portion of the program was designed to impact the projects that are not reached early in design.ⁱⁱ In order to guard against inappropriate savings claims on the part of the utility, a series of ongoing studies have been, and are, underway to determine the program impact relative to what market actors would have done without program intervention. The studies evaluate the relative impact of the program at all stages of project intervention. Savings that are claimed by the utility in excess of actual program impacts are defined as free-ridership. Free ridership is a major factor used for the establishment of the program Net-To-Gross (NTG) factor, a multiplier applied by the CPUC to all program accomplishments. The current NTG multiplier for Savings By Design is .82 for commercial projects. This multiplier, applied against individual projects and total program savings claims quantifies and accounts for the impact of late program involvement.

- Due the audit time constraints, we were unable to determine the extent of the potential problem.

C14. PG&E complied with the Express Efficiency program rules.

- A breakdown of the dollars awarded and the number of paid rebate applications during the audit period is presented in **Exhibit IV-18**. The activity level in program year 2000 was exceptional, due in large part to the California energy crisis.

Exhibit IV-18: PG&E Paid \$5.8 Million in Rebates for Express Efficiency Programs During the Period 1998 to 2002

Program Year	Number of Applications	Rebates Paid	Average Rebate per Application
Downstream Program			
1998	2,402	\$ 5,384,877	\$2,242
1999	2,377	3,904,076	1,642
2000	21,220	12,853,577	606
2001	6,464	17,219,690	2,664
2002	3,944	5,719,706	1,450
Total	36,407	\$45,081,926	\$1,238

ⁱⁱ PY2004/PY2005 Energy Efficiency Program Proposal, R. 01-08-028, Statewide Nonresidential New Construction, Savings By Design, Confirmation Number: 1127-04, February 2004, Revised, page 7, paragraph 3 “For participants who would not normally consider or cannot use a fully integrated design approach, the Systems Approach provides a simplified, performance-based method that moves owners and design teams far beyond simple prescriptive approaches. The Systems Approach is appropriate for small buildings with simple system interactions, or for projects where the design of the energy systems is done at different phases, where one energy system predominates, or where program intervention occurs late in the design.”

Program Year	Number of Applications	Rebates Paid	Average Rebate per Application
Upstream Program			
1999	324	\$1,854,619	\$5,724
2000	329	2,791,149	8,484
2001	271	2,430,475	8,969
Total	924	\$7,076,243	\$7,658
Vendor Bonuses			
1999	670	\$134,000	\$200
2000	18,595	4,041,853	217
2001	1,533	1,610,574	1,051
Total	\$20,798	\$5,786,427	\$278

Source: Non-Residential Program Data (Data Response KE-008); blueCONSULTING Analysis.

- A general overview of PG&E's Express Efficiency program process is shown in **Exhibit IV-19**.

Exhibit IV-19: PG&E Express Efficiency Program Process

Organization	Step
Central Processing Center (CPC)	Initial screening and logging of the Express Efficiency applications: <ul style="list-style-type: none"> ▪ The applications are generally sent to the CPC. The CPC performs initial screening of the application for completeness and eligibility and logs the application into the Marketing Decision Support System (MDSS). ▪ If the completed application does not require a post-field inspection, the application is forwarded to the technical reviewers. Applications are flagged for inspection if the rebate amount is greater than the inspection limit put forth in the program rules. According to PG&E, program managers also initiated inspections if there were questions about a particular application, or a history of problems with the vendor doing the installation work.
Central Inspection Processing (CIP)	Post-field inspections of projects flagged for inspections: <ul style="list-style-type: none"> ▪ CIP downloads the list of projects flagged for inspection in MDSS electronically and assigns the inspection work orders to specific inspectors. ▪ The CIP inspector records the inspection results and leaves a copy with the customer. If possible, the CIP inspector also obtains customer signature on the inspection report. ▪ The inspection results are uploaded into MDSS. ▪ The CPC clerk then pulls those applications that passed inspections from the pending file for processing and technical review.
Technical Consultant	Technical review of each application. <ul style="list-style-type: none"> ▪ The technical reviewer works directly with the customer or vendor to rectify deficiencies. ▪ Applications with rebates over \$5,000 are reviewed by a second technical reviewer. ▪ Approved applications are returned to the CPC clerk. The CPC clerk copies the application for CPC file, forwards the original application to the MPC for final administrator review, and updates the status code in MDSS to show that the application has been sent to General Office.

Organization	Step
Marketing Processing Center (MPC)	Final administrative review and payment authorization <ul style="list-style-type: none"> The MPC staff performs a final administrative review of the application to make sure that application is complete, attached documentation meets program requirements, and incentive calculation is correct. If necessary, MPC obtains the missing information from CPC. Applications are authorized for payment upon approval. Payment authorization is uploaded into MDSS twice a week, with nightly transfer to SAP. SAP prints checks the next day. The check is automatically mailed to the designated payee, unless a special handle request is made to return the checks to MPC. The check information is automatically downloaded from SAP to MDSS.
MPC	Special handle request <p>If a special handle request is made, the entire batch of checks issued in that particular check run is returned to MPC. MPC then distributes the special request checks to Accounts Services and manually mails the rest of the checks in the batch.</p>

Source: Express Efficiency Process (Document Response PGE-KE-005).

- Customers must install the project before submitting an application to PG&E for review and payment. All applications go through a two-stage review process: a technical review by the CPC, and a final administrative review by the MPC.
- An overview of PG&E's compliance with the Express Efficiency program rules is shown in **Exhibit IV-20**.

Exhibit IV-20: PG&E Complied with Express Efficiency Program Rules During 1998-2002

	1998	1999	2000	2001	2002
Measures Eligible for Customer Incentive	✓	✓	✓	✓	✓
Rebate Amount Limit	✓	✓	✓	✓	✓
Double Dipping (including double dipping across program years)	✓	✓	✓	✓	✓
Customer Eligibility	✓	✓	✓	✓	✓
Inspections	✓	✓	✓	✓	✓

✓ = Compliance No= Non-Compliance

Source: blueCONSULTING Analysis.

- blueCONSULTING's review confirmed that PG&E only provided rebates for Express Efficiency measures that were eligible for each of the program years.
- There were no instances in which the rebate amount exceeded the account or corporate parent limit.
- There were no instances of double dipping.

- All customers who received Express Efficiency rebates were PG&E ratepayers on non-residential rate schedules and were properly classified as large or small based on the rate schedules.
- Inspections were performed in accordance with the requirements.
 - ⇒ All applications are subject to random inspection and applications with rebate amounts over \$2,500 require post-field inspection (the inspection threshold amount varied from year to year and ranged from \$1,000 to \$5,000 during the audit period.)
 - ⇒ Inspections are performed by PG&E's Central Inspection Program (CIP).

C15. PG&E has established processes to ensure compliance with SPC rules.

- PG&E issues annual Standard Performance Contract program manuals which describe the program rules and provide detailed descriptions of the SPC process. These manuals describe program requirements and limitations, processes and procedures, rebate levels, time lines, performance measurement and other additional relevant information. The manuals are available to PG&E personnel, energy service providers, customers and other interested parties. They are also available on the PG&E web site. SPC program rules are summarized in Appendix B.
- PG&E uses separate databases to track the status of the SPC projects and contracts. The SPC projects are tracked in the SPC Database, which is linked to MDSS. SPC Contract status is tracked using the Contract Tracking and Reporting System (CTRS) database. PG&E periodically ran queries of its SPC database to ensure that no one sponsor, including utility affiliates, reserved more than the allowed funding.
- During the technical review stage, the SPC technical consultant reviewed each application to ensure that:
 - ⇒ The particular project application complied with the applicable customer site cap rules.
 - ⇒ The project's total cost was reasonable for the scope and complexity of the project.
 - ⇒ Any project containing savings from a lighting end-use also contained at least 20 percent saving from at least one other end use (PY 2002 only).
- Compliance with statewide limits for SPC rebates to a corporate entity was monitored jointly by the three utilities.
 - ⇒ Initially, in order to maintain compliance with this rule, the utilities established a "master list" containing information on each project. This list was maintained as an Excel spreadsheet, and was circulated among the three utilities on a monthly basis, or more often if warranted.

- ⇒ For program years 2000 through 2002, the three utilities decided on a different approach to monitoring the statewide funding limitations. The premise of the new approach was that as long as any single customer's accumulated reserved incentive did not exceed one third of the statewide cap, it would not be possible for the customer to reach the statewide cap.
- ⇒ If any customer's total incentive within PG&E's territory approached one third of the statewide cap (\$500,000) PG&E staff would notify the other two utilities to determine how close the customer was to the statewide cap of \$1.5 million.
- In order to ensure that a project funded in the SPC program did not receive incentive funds from any other programs (double dipping) PG&E primarily relied on the fact that in most cases, if a project was eligible under the SPC program rules, it would not be eligible under any other program. To verify eligibility PG&E:
 - ⇒ Examined the rate schedule.
 - ⇒ Determined the type of project. SPC is for retrofit projects only.
 - ⇒ Confirmed that the end-use measure was eligible for SPC funding.
 - ⇒ In cases where a project could possibly be considered in another program, it was the responsibility of the PG&E account manager and the SPC program staff to ensure that the same measures received compensation in only one program.
- The Marketing Processing Center also checked for double dipping. When an SPC application was received, MPC searched for the same measure, customer and location in MDSS, and contacted the project manager for follow-up on any potential duplicate items.
- Compliance with the 2002 rule that “at least 20% of the energy savings come from non-lighting replacement measures, such as air conditioning (AC) retrofits, high efficiency motors or lighting controls” was checked by the reviewer and program manager.

C16. The results of blueCONSULTING’s review of the SPC programs indicate that PG&E has complied with the program rules.

- A breakdown of the dollars awarded and the number of paid rebate applications during the audit period is presented in **Exhibit IV-21** below.

Exhibit IV-21: PG&E Paid Out \$28.7 Million in Rebates for SPC Programs During 1998 to 2002

Program Year	Number of Applications	Paid Rebates (\$000)	Average Rebate per Application
1998	31	\$6,256	\$201,791
1999	77	5,106	66,306
2000	127	5,388	42,421
2001	233	8,972	38,508
2002	83	3,029	36,493
Total	551	\$28,750	\$52,178

Source: Non-Residential Program Data (Data Response KE-008); blueCONSULTING Analysis.

- An overview of PG&E's compliance with the SPC program rules is shown in **Exhibit IV-22**.

Exhibit IV-22: PG&E Complied with the SPC Program Rules

	1998	1999	2000	2001	2002
Project Sponsor Caps	✓	✓	✓	✓	✓
Affiliate Caps	NA	✓	✓	✓	✓
Customer Site Caps	✓	✓	✓	✓	✓
Corporate Parent Caps	✓	✓	✓	✓	✓
Lighting Caps	NA	NA	NA	NA	✓
Double Dipping.	✓	✓	✓	✓	✓
Incentive Caps.	NA	NA	NA	✓	✓

✓ = Compliance No= Non-Compliance NA = Not Applicable

⇒ No sponsor exceeded the applicable project sponsor cap.

⇒ No utility affiliate exceeded the cap during the audit period.

- In 1998, there was no specific cap for utility affiliates. The most total contract dollars for utility affiliates were reserved for Edison Source. Edison Source contract applications totaled \$1.1 million.
- In 1999, the affiliate cap for the large SPC program was \$1.3 million. The most total contract dollars for utility affiliates were reserved for Sempra. Sempra contract applications totaled \$504,000. The largest projects were for Jack in the Box and the Department of Defense.
- In 2000, 2001, and 2002 Edison Source, Pacific Gas & Electric Energy Solutions and Sempra did not have any project applications.

⇒ PG&E did not exceed the customer site or corporate parent caps.

⇒ PG&E has complied with the 2002 rule that that at least 20 percent of the energy savings come from non-lighting replacement measures. Lighting measures represent less than 1 percent of the \$9.6 million 2002 SPC incentive budget.

- There were no instances of double dipping. blueCONSULTING identified customer sites which received rebates for similar measures through the SPC and Express Efficiency programs. PG&E verified that the items installed were different for each program or the items applied for were installed in different areas within the same complex.

C17. blueCONSULTING's review of SPC project files identified no deficiencies.

- blueCONSULTING's detailed examination of a selected sample of paid SPC projects identified no deficiencies.
 - ⇒ All participants were eligible customers who had paid the PGC.
 - ⇒ Project documentation was adequate, and each file contained a signed customer affidavit attesting to the project parameters.
 - ⇒ The files included documentation that the project had been approved and inspected before installation of the energy efficient equipment.
 - ⇒ All sample files included a calculation of the incentive rate and the verified energy savings for which the applicant was to be paid.
 - ⇒ Project files included copies of contracts and or agreements that spelled out the program terms and conditions including the maximum allowable rebate.
- blueCONSULTING also reviewed a sample of SPC projects that were rejected by PG&E and confirmed the projects were rejected appropriately.

C18. blueCONSULTING's review of PG&E's SPC data identified 52 projects which remain open in spite of the fact the program is over, and three projects for which PG&E was not reimbursed the amount which it initially overpaid.

- blueCONSULTING identified a number of PY 2000 and PY 2001 projects which are still open even though it is well after the program close date. PG&E has not yet received the operating reports and made final payments for these projects.
 - ⇒ These applications were accepted and the installation was completed and the initial payment was made to either the Project Sponsor or the Customer after the installation was verified. The Customer or Sponsor was required to perform monitoring for a 12-month period and provide PG&E with the results in order to qualify for the remaining incentive. This was explained in the forms and instructions the Customer and the Sponsor signed in order to participate.
 - ⇒ PG&E tracks all SPC applications and sent out a reminder letter to inform the applicants of the due date of these reports.
 - ⇒ PG&E is working to close these projects and expects resolution of these projects before the end of the year.

Exhibit IV-23: PG&E Has Not Received Operating Reports and Made Final Payments for Several SPC Projects

Program Year	Customer Type	Number of Projects with Outstanding Operating Reports	Program Close Date
2000	Large	0	All payments by May 10, 2004 (LCSPC), MV1 roughly 2/15/03, MV2 roughly 2/15/04. May 10, 2003 for (SCSPC)
	Small	3	
2001	Large	17	Installation by June 1, 2002. Operating Report 6 months later (calculated) or one year (measured) later.
	Small	32	
Total		52	

Source: Standard Performance Contract Policies and Procedures and Participant Handbooks, SCE Data Response 91; PG&E SPC Project Data (Document Response PGE-KE-001.2)

- PG&E did not receive reimbursement for three of the thirteen SPC projects which were initially overpaid.
 - ⇒ blueCONSULTING identified 13 instances in which PG&E's payments to the customer were too high because the actual measured savings was less than the savings anticipated at the project outset.
 - ⇒ PG&E issued letters requesting repayment of the overpaid amount.
 - ⇒ As shown in **Exhibit IV-24**, there were three projects in Program Years 1998 and 1999 for which PG&E was not reimbursed the amount overpaid.

Exhibit IV-24: PG&E Did Not Receive Reimbursement for 3 of the 13 SPC Projects Which Were Initially Overpaid

Program Year	Overpayments		Customer Repaid PG&E the Overpaid Amount
	Number of Projects	Amount	Number of Projects
1998	2	\$10,195	1 6 3 10
1999	1	\$88,586	
2000			
2001			
Total	3	\$98,781	

Source: SPC Project Data (Document Response PGE-KE-001.2); blueCONSULTING analysis, and follow-up discussions with PG&E.

5. Recommendations for the Company:

- R1. PG&E should tighten its administrative controls over the Savings by Design and Standard Performance Contract programs. (Refers to Conclusions No. C13 and C18)**
- R2. PG&E should review its customer files related to commitments to identify projects which have been inactive for an inordinate length of time and determine whether these should be excluded from reported commitments. (Refers to Conclusion No. C9)**

6. Policy Issues for the Commission:

- R3. Determine whether the use of PY 2000 contracts for PY 1999 Savings by Design incentives constitutes fund shifting. If appropriate, consider disallowing \$1.4 million in Savings by Design program customer incentive payments or grant PG&E retroactive approval to shift unexpended Program Year 1999 funds to Program Year 2000. (Refers to Conclusion No. C13)**

D. SCE

1. Background

SCE manages the Energy Efficiency programs as a separate division within the Customer Service Business Unit (CSBU), under the Director of Customer Programs and Services. The division follows the overall policy and procedural dictates of SCE. Energy Efficiency Division functions include management, administration and operation of energy efficiency programs, program reporting, and compliance with Commission policy. In 2002, the energy efficiency organization consisted of 70 employees. Within each program area (i.e., residential and nonresidential), there are managers and staff, and a dedicated financial professional.

Each program is assigned a Program Manager, whose primary responsibility is the overall success of the program. Although programs have changed over the five year audit period, they generally fall into one of the following categories: energy management services, rebate and incentive programs, and information programs for residential, nonresidential and new construction projects. While energy efficiency middle and upper management personnel are held accountable for managing programs to budgets and program goal development, Program Managers have primary responsibility for a program's success (i.e., achievement of program goals within budget). Specific responsibilities of Program Managers include:

- Design of specific program characteristics.
- Development of detailed budgets.
- Approval, processing and monitoring of program activities, expenditures, vendors, and contractors.
- Interface with other IOUs, particularly on statewide programs.
- Compliance with Commission requirements.

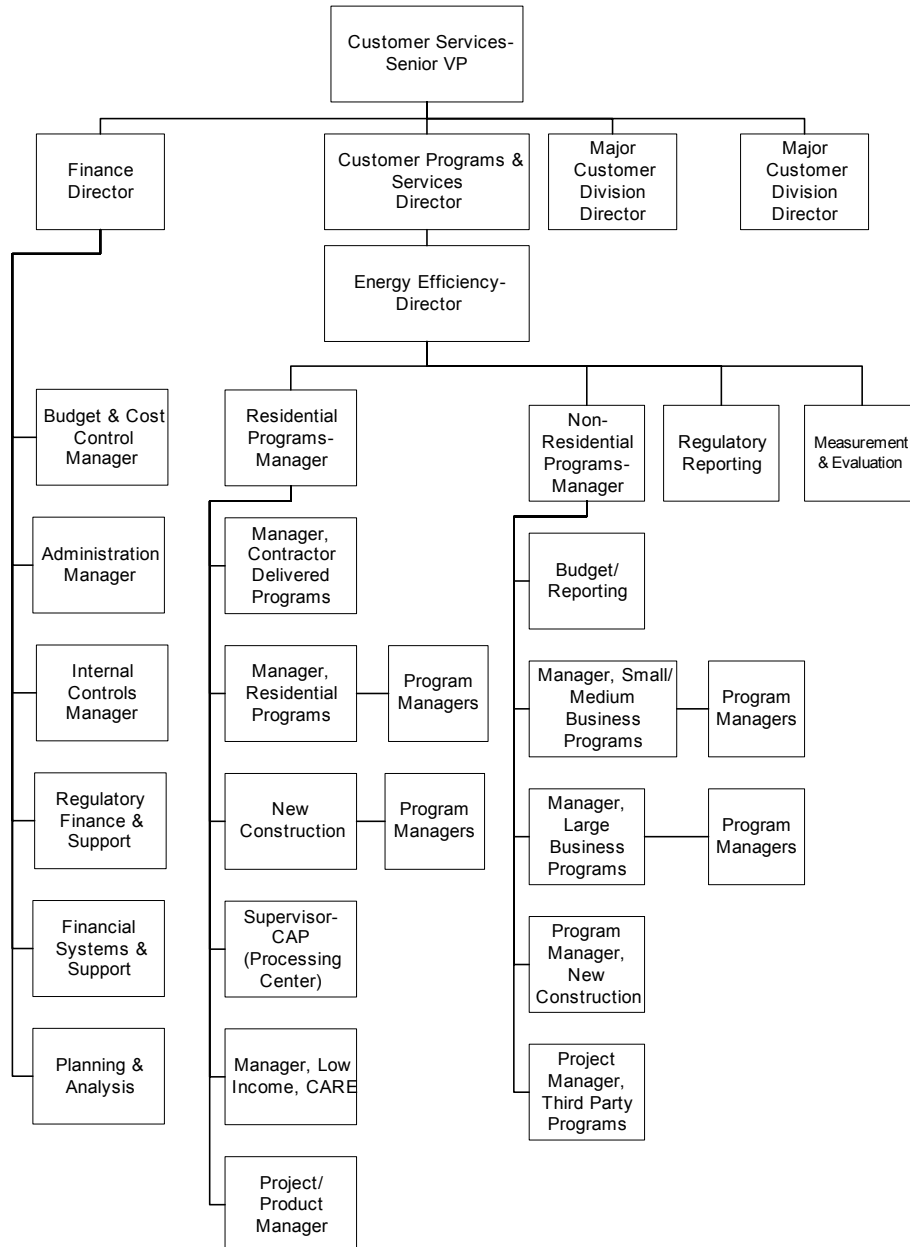
In addition to the Program Managers, programs are supported by, and program monitoring and controls are supplemented by:

- A separate Finance Division within the CSBU, responsible for overall accounting, budgeting, cost control, reporting and internal controls. The CSBU Internal Controls unit was established to assist CSBU management in establishing an effective system of internal controls. The unit assists CSBU management in establishing policies and procedures, and is responsible for verifying that controls are operating as intended. Areas reviewed by Internal Controls include: approval levels, documentation requirements, appropriate accounting classification, and information security. The unit also ensures compliance with regulatory and corporate policies and procedures, such as PGC program rules, SCE accounting and control policies, generally accepted accounting policies, and affiliate rules.
- A separate Major Customer Division within CSBU, which is responsible for survey and program information, CTAC, AgTAC, Technical Support, Pump Test and program delivery to nonresidential customers, including hard-to-reach small businesses.

- A separate human resources function, which is responsible for human resource issues related to energy efficiency personnel.
- A separate Communications and Market Management Division (within Customer Programs and Services) to assist in program promotion and customer communication.

An organizational chart is presented in **Exhibit IV-25**.

Exhibit IV-25: A Separate Unit Within CSBU Manages SCE's Energy Efficiency Programs (July 17, 2003)



Source: Orientation Presentations; SCE Data Response 14.

2. Summary of Adjustments

None.

3. Summary of Conclusions

Exhibit IV-26 provides a summary of the adequacy of SCE's Accounting Oversight and Management, along with appropriate comments, during the audit period.

Exhibit IV-26: Improvements in SCE's Controls Are Warranted

Control Area	Adequate? (Yes/No)	Comments	Recommendation
Corporate Control Environment			
1. Management organization provides adequate direction and oversight. There is effective communication to address problems and avoid mistakes.	Yes		
2. Executive management is committed to internal control and regulatory compliance. Codes of Conduct and related compliance programs are adequate.	Yes		
3. Organization design and staff contributes to appropriate control environment. <ul style="list-style-type: none"> ▪ Separation of duties is adequate. ▪ Staff is knowledgeable and adequately trained. ▪ The utility ensures staff continuity. 	Partial	While the staff is knowledgeable and adequately trained, there is inadequate planning for staff continuity if some positions are vacated. Additionally, separation of duties is inadequate.	The assignment of processing duties should be reviewed and modified to preclude the possibility of the same individual controlling all phases leading to payment of incentives.
4. The internal audit function of the PGC program is adequate. <ul style="list-style-type: none"> ▪ Audits are conducted by qualified personnel. ▪ Audit plans incorporate periodic reviews of major systems, tests of regulatory compliance, and program specific audits. They provide for appropriate follow-up. ▪ Independent audits are performed in accordance with regulatory requirements. ▪ Management initiates corrective action on findings. 	No	Program-level reviews were discontinued by IA. Reviews did not address management or program compliance. Control weaknesses identified by our audit had not been discovered by SCE personnel.	The charter of the Internal Controls function should be reviewed, and the work of IA should be expanded.
Program Design and Funding			
5. The utility's PGC personnel participate in statewide workshops and contribute to program design and reporting requirements.	Yes		
6. The utility has developed an appropriate process for timely identification of changes in regulatory requirements and incorporating these requirements into its energy efficiency programs. Commission requirements are adequately communicated to project managers, who are held accountable for compliance with Commission requirements.	Yes		
7. Procedures are in place to ensure program selection; budgeting and funding are performed within Commission guidelines.	Yes		
Program Oversight and Management			
8. Management performs effective oversight of PGC programs. Management reviews actual performance versus budgets and program goals.	Yes	SCE focuses on accounting and costs rather than management controls.	

Control Area	Adequate? (Yes/No)	Comments	Recommendation
9. The utility has established appropriate procedures for determining committed funds, tracking expenditures against commitments and releasing commitments.	Yes		
10. PGC procurement policies are appropriate and consistent with corporate procurement policies. <ul style="list-style-type: none"> There is a formal decision-making process for outsourcing vs. in-house work. There is a competitive contractor selection process. Contractor/vendor relationships are evaluated periodically. There is compliance with purchase order approval limits. 	No	SCE's resource planning and procurement practices are inadequate. SCE does not utilize appropriate criteria when making initial outsourcing versus in-house decisions. Competitive bidding is infrequent. Significant vendors have sole-source contracts throughout the audit period. Frequent change orders are issued, increasing contract duration and amounts.	The criteria for outsourcing vs. in-house processing decisions should be reviewed and updated to reflect the status of mature programs. The contractor and vendor selection process should include more frequent competitive bidding.
11. Contractor oversight and monitoring is adequate. <ul style="list-style-type: none"> The Energy Efficiency group has established procedures to monitor and control contractor activities. Work performed by contractors is verified. Contractor/vendor invoices are reviewed to ensure accuracy. 	No	SCE performs extensive review of documentation, provided by the contractor or vendor. However, no review is performed to ensure the work has actually been done.	Contractor and vendor monitoring and verification processes should be strengthened by the development of review processes (including field verification) to ensure that the work was actually performed.
12. On-site inspections are performed as appropriate.	Partial	Ability to override inspections.	The flexibility in the override functions, and the lack of audit trail should be reviewed by the CSBU Internal Controls functions.
Accounting and Cost Tracking (Control Activities)			
13. PGC program revenue and disbursements systems are integrated with the financial accounting systems and are adequately designed and documented.	Yes		
14. Program managers receive monthly budget vs. actual cost reports. Reviews are conducted to ensure program charges are appropriate, and variances are reviewed and resolved.	Yes		
15. The utility has established appropriate checks and quality control procedures regarding payment of incentives.	No	Separation of duties is inadequate.	The assignment of processing duties should be reviewed and modified to preclude the possibility of the same individual controlling all phases leading to payment of incentives.
16. Authorization levels for expenditure approval are appropriate.	No		Approval limits should be lowered to improve visibility.
17. There is adequate rebate application review and approval.	Partial	Separation of duties is inadequate. Processing functions are redundant.	Consolidation of processing functions, centers and systems should be comprehensively reviewed in 2004. As part of the consolidation review, the use of multiple tracking system/databases should be reconsidered.
Compliance (Program Rules)			
18. Program reporting is based upon information contained in the accounting records and is in compliance with Commission requirements.	Yes		
19. Participant eligibility for a program is determined.	Yes		

4. Conclusions

Corporate Control Environment

C19. Despite SCE's corporate control consciousness, energy efficiency programs and expenditures are not adequately reviewed and audited. Control deficiencies exist, but were not identified by SCE personnel.

- Basic control weaknesses addressed by this audit, and discussed later in this section, were not identified by either SCE's Corporate Internal Audit organization or CSBU Internal Controls.
 - ⇒ Prior to 2002, the energy efficiency balancing account was subject to an annual audit by SCE's Corporate Internal Audit. Internal Audit is SCE's formal audit organization. Internal Audit reviews transactions and internal controls and reports them to the audit committee of the utility, as well as the affected management team with recommendations for corrections. The balancing account has not been audited since 2001, and no audits were planned in 2003 and 2004 due to an assessment of low risk compared to other areas.
 - ⇒ In addition to Internal Audit reviews, the Internal Controls function of the CSBU also provides on-going operational and controls reviews and advisory services to the programs. Internal Control's oversight over PGC expenditures has been conducted primarily through the implementation of spot reviews and process and procedural improvements.
- Prior audits and internal control reviews did not address all areas of management controls or program operations.
 - ⇒ Prior audits focused on balancing account transactions. Other areas reviewed included fee-based services, contract reviews, and non-tariffed products and services, as shown below.

Exhibit IV-27: Confidential Exhibit - Redacted

- ⇒ No business process reviews, or management audits have been performed. Program specific reviews were limited to the appliance recycling program and SPC, and focused on program costs.
- ⇒ Internal Controls does not produce reports of its reviews.
- Problems with program documentation and inconsistencies between invoices and purchase order were noted in more than one Internal Audit, as shown below:

Exhibit IV-28: Confidential Exhibit - Redacted

C20. While SCE's energy efficiency staff is knowledgeable and adequately trained, the manner in which certain tasks are allocated among staff and vendors is not sufficient to preclude or detect potential irregularities. Additionally, there is inadequate planning for staff continuity if some positions are vacated.

- SCE's energy efficiency staff has remained fairly stable over the audit period. For certain programs, the same program manager has been in place since 1998. Other personnel have changed functions but remained within the energy efficiency organization.
- SCE relies extensively on one individual for regulatory planning and reporting. SCE faces a potential loss of continuity and knowledge of the regulatory history should this individual leave SCE.
- For certain programs, incentive checks were provided to SCE employees for distribution to customers rather than direct mail from Accounts Payable. Our testing of energy efficiency expenditures confirmed that this had occurred.
 - ⇒ Checks were routinely returned by Accounts Payable to SCE program managers or staff for delivery to the customers of the Standard Performance Contract (SPC) and Savings by Design (SBD) programs.
 - ⇒ A similar process had been in place for Express Efficiency, but was discontinued during the audit period.
 - ⇒ In 1998, Appliance Direct Rebate checks were created by Accounts Payable and mailed back to the rebate processing group for distribution to the customer. Employee names were printed on the check aprons. According to SCE, "[t]his allowed SCE to internally mail checks to the attention of responsible SCE employees within the Residential Rebate group, who would then give them to support personnel for mailing." This practice was later discontinued.
- Separation of duties is inadequate. There are no explicit controls in place to preclude an individual SCE employee from processing an application from inception through payment. This control deficiency, combined with SCE's practice of returning checks (for certain programs) to the originating area for distribution to customers and vendors, provides an opportunity for an internal resource to create and receive payment for fictitious or overstated projects.
 - ⇒ The same SCE employee can accept a customer application, approve the project, inspect the project (where applicable), and authorize payment.
 - ⇒ For SPC and SBD programs the employee may also receive the incentive payment check.

However, we found no evidence of abuse of the rebate payment process.

- Indirect, non-explicit procedures were insufficient as mitigating controls. SCE program management asserted that the Marketing Department Customer Satisfaction and the Measurement and Evaluation (M&E) processes provided mitigating controls over the segregation of duties; however, these processes do not perform this function.
 - ⇒ It is not the responsibility of Marketing or M&E to prevent or detect irregularities, or to otherwise provide any internal controls review. The Customer Satisfaction process performed by Marketing is not designed to uncover work not performed by vendors and/or customer checks not received. In fact, instructions in the survey indicate that if a customer responds that the service was not performed or the check not received, the call is to be terminated. No specific follow up of these terminated calls is conducted.
 - ⇒ The M&E process might uncover an irregularity and lead to an investigation. However, the M&E process is not designed to have a specific control function or role.
 - ⇒ In the case of both the Customer Satisfaction and M&E processes, the database of respondents to be contacted originates with the energy efficiency program staff and is not verified for completeness as part of either process. Names could be removed prior to receipt by Marketing or MA&E, and any names removed would be undetected.

Program Design and Funding

C21. During the audit period (1998-2002), the program selection and funds allocation process was a collaborative process involving the Commission, the CBEE, the Utilities, other interested parties, and in some cases the public. SCE participated in this process and programs were developed and funded in accordance with the Commission's objectives.

- The iterative program selection process involved:
 - ⇒ specific recommendations of the Commission,
 - ⇒ discussions with other utilities in specific meetings/workshops or as part of industry or trade group conferences,
 - ⇒ internally directed "research and development."
- Funds were allocated in basically the same manner; however, significant consideration was given to the success of the program in meeting goals in prior years. A portfolio of programs was presented to the Commission, along with proposed spending. This proposal was accepted and/or amended by the Commission.
 - ⇒ Program managers and finance staff prepared draft program plans and budgets for review by SCE internal resources.

- ⇒ After review, the program plans and budgets were submitted to the Commission. The Commission approved or changed the plans and budgets.
- ⇒ Commission directives were communicated to SCE program management.
- ⇒ Funds allocation (budgets) were prepared or amended based on Commission directives.
- blueCONSULTING's analysis confirmed that Commission-approved budgets served as the basis for internal SCE energy efficiency budgets.
 - ⇒ Detailed budgets are prepared collaboratively by program management and finance staff. SCE's CSBU and Corporate management reviews all budgets and incorporates them into overall SCE financial plans.
 - ⇒ Budgets are reviewed by SCE's Regulatory Planning and Reporting group to ensure compliance with Commission requirements. **Exhibit IV-29** provides approved SCE funding levels during the 1998 through 2002 audit period.

**Exhibit IV-29: The Commission Authorized \$394 Million in Funding for SCE
(Dollars in Thousands)**

Year	Amount	Regulatory Authority
1998	\$84,474	D. 97-12-103, December 16, 1997, Attachment 4 Table 1 for January through September. Resolution E-3555, July 23, 1998, Page 3-6 for October through December.
1999	80,218	Resolution E-3592, April 1, 1999.
2000	91,584	D. 99-12-053, December 16, 1999, Appendix A Page 1.
2001	86,710	D. 01-01-060, January 1, 2001.
2002	51,251	D. 02-04-001, April 3, 2002. This decision corrected the budget previously approved in D. 02-03-056.
Total	\$394,237	

Source: D. 97-12-103, 99-12-053, 01-01-060, and 02-04-001; Resolutions E-3555 and E-3592.

- ⇒ **Exhibit IV-30** provides a list of decisions approving program plans and budgets which address program funding used in our review.

Exhibit IV-30: SCE Complied with Commission Funding and Budgeting Requirements

Decision/Resolution	PY/Guidance (Key characteristics of Program Design and Funding Tested)	SCE Comply?
D. 97-12-103	Adopted CBEE recommendations on policy rules, budgets, program design and incentives. Approved interim 1998 budgets.	Yes
Resolution E-3555	Bridge funding for 1999 programs. Augment interim budget with additional funds effective 7/23/98.	Yes
Resolution E-3579	Carryover unexpended 1998 program funds.	Yes
Resolution E-3581	Continue 1998 programs at 1998 funding levels through February 1999. Encumber 1998 funds prior to using 1999 funds.	Yes
Resolution E-3589	Extends 1998 programs on a monthly basis. Adopts 1999 program budgets, structures and incentive mechanisms.	Yes

Decision/Resolution	PY/Guidance (Key characteristics of Program Design and Funding Tested)	SCE Comply?
Resolution E-3592	Adopted 1999 program plans and budgets by 14 program categories. PY 1999 budgets extended through year 2000.	Yes
D. 99-03-056	Continuation of programs and funding for PY 99 through 12/31/01.	Yes
D. 99-12-053	Carryover to PY 00 and PY 01 all unallocated program funds in PY 99 and all unexpended and uncommitted funds from PY 98.	Yes
D. 99-12-053	Approves program budgets for PY 2000 on an interim basis.	Yes
D. 00-07-017	Creates the Summer Initiative Program. Adopts revisions to the PY 00 programs and budgets.	Yes
D. 99-03-056 D. 99-08-021 Resolutions E-3578 and E-3592	Approval of PY 00 and PY 01 programs and funding.	Yes
D. 01-01-060	Approval of PY 01 energy efficiency programs and proposed budgets, with modification.	Yes
D. 01-11-066	Extends Summer Initiative Program through 3/31/02. Extends PY 01 programs with predetermined budgets thru 3/31/02.	Yes
D. 02-03-056 D. 02-05-046 D. 02-06-026	Approval of PY 02 programs and proposed budgets.	Yes

Source: Regulatory documents provided in response to SCE Data Request 2.

C22. SCE appropriately communicates Commission requirements to program and project staff who are held accountable for compliance with Commission requirements. SCE management tracks progress against Commission goals.

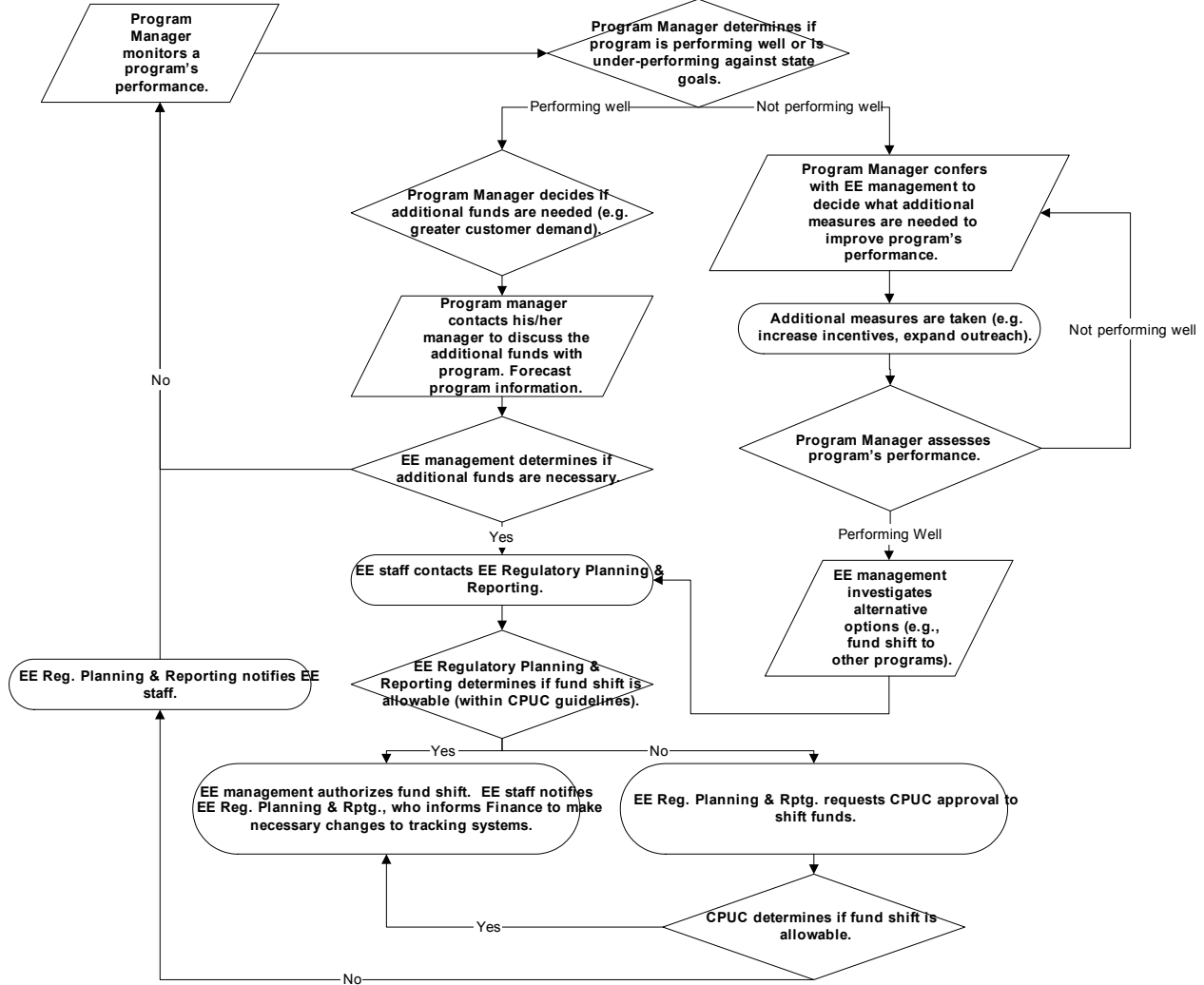
- Energy Efficiency management and the Energy Regulatory Planning and Reporting group monitor Commission requirements.
- Commission requirements are properly communicated to the program staff.
 - ⇒ The Regulatory Planning and Reporting group notifies energy efficiency program management of Commission policy and directives both verbally and in writing. Energy efficiency program management then discusses policy and directives with program level staff and managers.
 - ⇒ Periodic update meetings are held to communicate Commission requirements.
 - ⇒ Interpretations of Commission guidance are discussed by management and communicated to program staff via meetings, memos, and other internal communications mechanisms.
 - ⇒ Program management and staff are conversant on current issues and Commission guidelines.
- Program managers and finance staff circulate approved program plans, descriptions, and budgets.

- Commission-established program goals and targets are translated into performance evaluation goals for energy efficiency senior management and individual energy efficiency program managers, and serve as the basis for bi-weekly reporting of program performance. Progress/goal tracking is timely and comprehensive.
 - ⇒ CSBU adopts the aggregate energy savings goals as one of its key performance indicators (KPI). Other energy efficiency goals are adopted as formal CSBU achievement goals (AGs). Compensation is directly tied to achieving KPIs and AGs. Commission-adopted goals are incorporated into individual employees' performance evaluations.
 - ⇒ As projects are verified, inspected or completed, information is entered daily into each program's proprietary tracking data base. The information includes progress, status, financial information, and goal tracking information by transaction, project and/or program. The information from these progress/goal tracking databases is forwarded to the Measurement and Evaluation (M&E) area and is used in the M&E process.
 - ⇒ This information is included in the bi-weekly reports and other periodic reports. These reports are reviewed by all levels of program staff on a bi-weekly and interim basis.
- Internal policies, procedures and program manuals are created or revised and distributed by program management. Program manuals and desk-level procedures evidenced the understanding of and timely communication of directives.
- The Energy Efficiency Regulatory Planning and Reporting group secures information from program management and finance staff and reports program information based on Commission requirements.

C23. SCE's fund shifting activities were in accordance with Commission guidelines and policy goals, and SCE's decision-making process for determining fund shifting opportunities is adequate.

- **Exhibit IV-6** (provided in the Background section of this Chapter) details regulatory guidelines for fund shifting practices during the audit period. blueCONSULTING's review identified no instances of unauthorized fund shifting.
- **Exhibit IV-31** describes the fund shifting process at SCE. While the Program Manager is primarily responsible for a program achieving its goals, other energy efficiency staff, such as the Energy Efficiency Regulatory Planning and Reporting group, is actively involved in the process to ensure compliance with Commission regulations. If SCE staff determines a fund shift is necessary and within Commission guidelines, Finance is notified of the fund shift as well.

Exhibit IV-31: SCE's Fund Shifting Process Is Iterative



Source: SCE Data Response 231, blueCONSULTING Analysis.

- A significant amount of funds was shifted during the audit period, as detailed in **Exhibit IV-32**. Approximately 8.6 percent of the Commission authorized budget was shifted during 2000, representing the largest annual shift during the audit period. 2000 was an unusual year because the utilities were able to shift funds among program elements, and the earnings mechanism encouraged utilities to spend funds and increase program activity. In addition, programs and their respective budgets were also categorized into 14 program elements, not programs or program categories (residential, nonresidential, new construction).

Exhibit IV-32: Annual Budget Shifts Ranged From 0.3% to 9% of Authorized Budgets During 1998-2002

Year	Total Amount Shifted	Commission Authorized Budget	% Budget Shifted	Commission Authorization	Commission Authorization Date
1998	\$725,000	\$84,474,000	0.86%	Not applicable	Not applicable
1999	\$280,000	\$95,942,000	0.29%	Not applicable	Not applicable
2000	\$7,853,424	\$91,584,000	8.58%	AL 1473-E ALJ Ruling AL 1472-E	9/10/00 9/29/00 9/9/00
2001	\$1,652,000	\$86,710,000	1.91%	Not applicable	Not applicable
2002	\$1,077,500	\$51,251,000	2.10%	AL 1650-E ALJ Approval	9/29/02 10/28/02

Source: SCE Data Responses 114 and 180; blueCONSULTING Analysis.

- In 2002, SCE shifted small amounts of funds (\$100 to \$500) among programs due to tight budgets created by the bridge funding process.
- SCE generally shifts funds among programs to bolster high-performing programs and to respond to greater customer demand. SCE tries to increase the demand for a low-performing program prior to shifting funds away from the program. For example, prior to shifting funds from the Residential Financing Program in 1998, SCE employed various strategies to increase participation including:
 - ⇒ a free CHEERS rating to interested customers;
 - ⇒ a contractor incentive program;
 - ⇒ an interest rate buy-down for SCE customers; and,
 - ⇒ extensive marketing and outreach efforts to SCE customers.
- There are a few instances where funds were shifted from a program when the program was achieving its goals with budget remaining. For example, in 2000, \$89,000 was shifted from the Major Appliance Labeling. The funds were available to shift to other programs because of program cost efficiencies.

Program Oversight and Management

C24. Program performance is reviewed by Program Managers and senior energy efficiency management.

- Budgeting processes and controls are comprehensive.

⇒ Budgets assigned to programs by SCE follow Commission guidance and/or approval of information submitted to the Commission. Budgets are approved by SCE management and are communicated throughout the organization.

⇒ Reviews of budget versus actual expenses are timely and comprehensive. The CSBU Finance Group utilizes Customer Service Financial System-generated reports to monitor programs' financial status. These reports are extensively reviewed for accuracy by Program and Finance staff and management. Timely corrections are made.

- One report reviews budget performance on a monthly basis and is sent to Program Managers and designated support personnel.
- Another report compares year-to-date expenditures for each PGC program to the authorized budget. This report is generated periodically for analysis of program expenses in relation to authorized expenditures and helps to forecast potential carry over amounts. This second report is used internally by the CSBU Finance Group.

⇒ Periodic meetings occur to discuss program financial performance and the potential need for budget modifications, re-allocations and "fund shifts."

- Most large programs have a proprietary tracking database that is updated on a regular basis. Reports from these databases are frequently reviewed by program management. Information from these databases is consolidated into bi-weekly reports that are reviewed by multiple layers of management, including the Finance Division Director, Energy Efficiency Division Director, Energy Efficiency Division Managers, Residential and Non-Residential Program Managers.
- Biweekly reports show status of the portfolio of programs in meeting the Commission's program goals. Expenditures and progress against energy and peak demand savings targets are reported for each program and at a summary level for the entire portfolio.

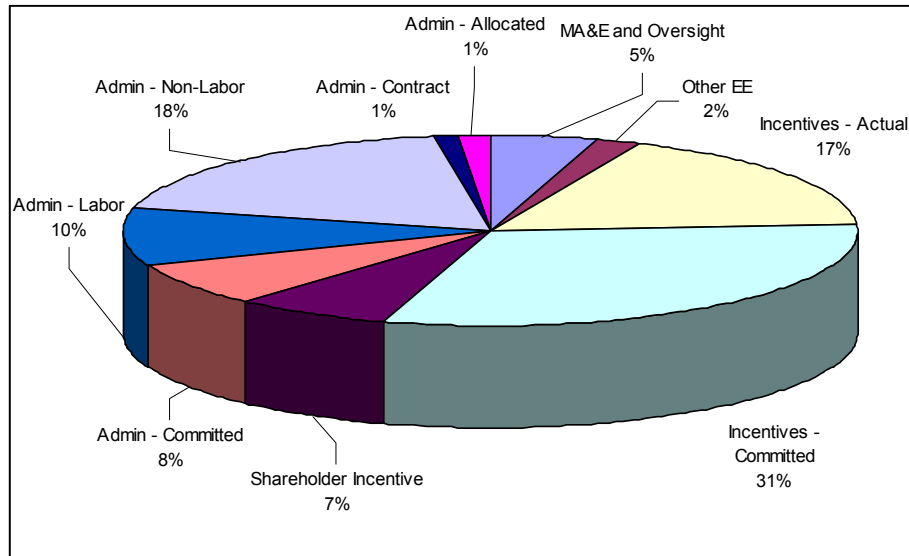
C25. SCE made efforts to mitigate the potential negative effects of the commitment process, and blueCONSULTING's audit found no evidence of SCE abuse of the commitment process.

- By definition, the commitment process potentially restricts a program progress and may eliminate customers or projects because programs are perceived to be fully subscribed when they ultimately may not be, as customers subsequently drop out of the program. Additionally, the payment of shareholder incentives based on recorded amounts (including commitments) creates a potential incentive for the inflation of committed numbers.
- Commitments, sometimes called reserves, represent promises to pay out program funds. These commitments are made based on defined actions which vary by program. Although commitments exist in many programs, they are most significant and most

material in those programs with a long completion cycle. For example, Savings by Design projects require up to three years from inception and commitment to final inspection and payment. Funds are committed in order to ensure that they are available to pay participants upon completion of required program activities.

- Committed funds are added to expended funds to produce “recorded” expenditures reported to the Commission in the Annual Reports. Reported commitments are important since they materially impact the progress the utility has made in moving the program forward – in anticipated spending of the allocated funds, in anticipated energy savings, and, potentially, in customers served/not served due to the availability of non-committed funds. Accomplished progress, therefore, is dependent on the eventual satisfaction of commitments. During part of the audit period, commitments were also a component of shareholder incentives earned by the utilities.
- As shown in **Exhibit IV-33**, commitments represented a significant portion of reported costs during the period 1998-2002.

Exhibit IV-33: Commitments Represented the Largest Portion of SCE's Reported Costs During the period 1998-2002

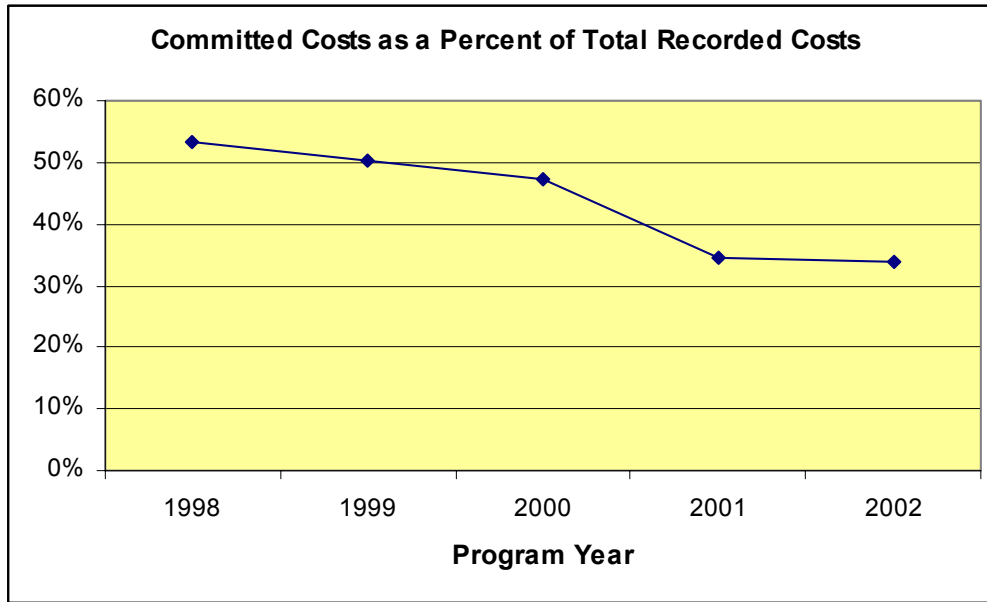


Note 1: Does not include Summer Initiative costs.

Source: blueCONSULTING Analysis; SCE Annual Reports.

⇒ As shown in **Exhibit IV-34**, in the early program years, there was an approximately 1:1 ratio of expenditures and commitments, indicating that only 50 percent of the programs' funds were paid in the actual calendar year. This decreased over time as a result of differing program emphasis and program modifications.

**Exhibit IV-34: Commitments Decreased as a Percent of Recorded Costs
(Dollars in Thousands)**



Commitments	Expended in PY (Column 1)	Open Commitments at Year End PY (Column 2)	Total Recorded [Column 3 (1+2)]	Ratio Expended to Commitment (Column 4)
PY 98	\$35,526	\$40,440	\$75,966	0.9:1
PY 99	36,664	36,849	73,513	1:1
PY 00	44,370	39,853	84,223	1.1:1
PY 01	57,321	30,224	87,545	2:1
SI	18,625	NA	18,625	NA
PY 02	50,345	25,753	76,098	2:1

Source: blueCONSULTING Analysis; Data Response 29; and SCE Energy Efficiency Program Annual Reports.

⇒ SCE's committed costs are largely from the SPC programs. **Exhibit IV-35** shows the contribution of the SPC programs to the reported total.

**Exhibit IV-35: SPC Was the Largest Contributor to Committed Costs from 1998-2002
(Dollars in Thousands)**

PY	SPC Commitments	Total Commitments	Percent SPC
1998	\$21,082	\$40,440	52%
1999	22,556	36,849	61%
2000	19,358	39,853	49%
2001	6,115	30,224	20%
2002	9,393	25,753	36%
Total	\$78,504	\$173,119	45%

Source: SCE Annual Reports.

- A significant amount of the commitments were later “dropped” or released. This suggests greater anticipated success in deploying allocated funds than ultimately turns out to be the case. Because of the timing of these programs, the released commitments are not utilized for the PY programs for which they were originally budgeted, but are available for use in future program years.

⇒ As **Exhibit IV-36** indicates, the first three years of the audit period had imputed commitment “dropout” rates in excess of 30 percent. The imputed dropped commitments for the first four years of the program totaled approximately \$48 million.

Exhibit IV-36: Dropped Commitment Amounts Decreased from 38% in 1998 to 22% in 2001 (Dollars in Thousands)

Program Year	Open Commitments at Year End PY	Expended in subsequent CYs through 12/31/02	Commitments at 12/31/02	Imputed "Dropped" Commitments	Percent of Original PY Commitments Dropped
PY 98	\$40,440	\$23,000	\$2,209	\$15,231	37.66%
PY 99	\$36,849	\$18,846	\$4,504	\$13,499	36.63%
PY 00	\$39,853	\$19,818	\$7,286	\$12,750	31.99%
PY 01	\$30,224	\$15,117	\$8,335	\$6,772	22.41%
SI				N/A	N/A
PY 02	\$25,753	Not Available	\$25,753	[Note 1]	N/A
Total				\$48,251	

Note 1: Information currently available would not reflect the imputed dropped commitments since the timeframe is too short.

Source: DR 29, DR 65, SCE Energy Efficiency Program Annual Reports.

- ⇒ Many open commitments are for programs such as SPC and Savings by Design, which have an extended payout time frame due to the nature of the projects involved. SCE reported that “drop out” rates are not computed.
- ⇒ For those commitments that can be traced to annual reports on a program level, mainly SPC, the levels of dropped commitments are even higher than the aggregate. As indicated by **Exhibit IV-37**, non-residential SPC dropped commitments are imputed at \$35 million, or approximately 71 percent of all dropped commitments.

**Exhibit IV-37: SPC Dropped Commitment Rates Decreased from 52% in 1998 to 36% in 2001
(Dollars in Thousands)**

Non Residential SPC Program	Open Commitments at Year End PY	Expended in subsequent PYs	Cmt's at 12/31/02	Imputed "Dropped" Commitments	Percent of Original PY Cmt's Dropped
PY 98	\$17,044	\$8,062	\$50	\$8,932	52.40%
PY 99	\$20,998	\$3,266	\$3,350	\$14,382	68.49%
PY 00	\$17,434	\$3,266	\$4,500	\$9,668	55.46%
PY 01	\$4,825	\$652	\$2,450	\$1,723	35.71%
SI				NA	NA
PY 02	\$1,516	NA		NA	NA
Total				\$34,706	

Source: blueCONSULTING Analysis; Data Responses 29, 65, and 92, SCE Energy Efficiency Program Annual Reports.

- As programs evolved, efforts were undertaken to mitigate the potential effects of the commitment process on program performance. SCE implemented program design changes as well as changes in the commitment process.
 - ⇒ Savings by Design had no over-commitment strategy as the point of over-commitment has never been reached.
 - ⇒ In 2000, when SCE's residential new construction program began offering incentives, no over-commitment was allowed. In 2002, based on prior year drop-out rates, SCE management adopted a policy which allowed the Program Manager to over-commit units at an amount not to exceed 140 percent of the program budget. SCE tracked commitments in its program tracking system and when total commitments reached 138 percent, SCE closed the program.
 - ⇒ SCE worked with the other utilities and the CBEE to implement the following changes to the SPC program design to reduce the drop out rate of fund commitments: allowing customers to participate directly; eliminating the basic project application; reducing the measurement and verification (M&V) requirements; and shortening the project installation time.
 - ⇒ The PY 1998 Large SPC program did not allow over-committing. When the program was fully subscribed a wait-list was created. In 1999 and 2000 no strategy was utilized for the Large SPC program as the point of over-commitment was never reached. Beginning in 2001, over-commitment of up to 110 percent of budget was allowed.

- Whether the commitment process ultimately has a potentially negative effect on customers served is dependent on whether the programs were oversubscribed.
 - ⇒ For the residential new construction program, prior to 2002 the point of over-commitment was not reached.
 - ⇒ For the Savings by Design Program, the point of over-commitment was not reached in any year of the audit period (i.e., all applicants could be covered by existing funds.
 - ⇒ The point of over commitment was not reached for the large SPC program in 1999 and 2000. In 1998, a wait list was created but additional funding was authorized by the Commission and all wait list applicants were funded. As shown in **Exhibit IV-38**, in 2001 and 2002, on average, 18 percent of the SPC program customers that were placed on a wait list subsequently dropped out of the program. The majority either reapplied or were ultimately funded out of the current program year. The point of over-commitment was never reached for the small SPC program.

Exhibit IV-38: SCE's SPC Wait List Drop Out Rate Averaged 18 Percent in 2001 and 2002

Program Year	Applicants Placed on Wait List	Disposition			
		Funded in Current PY	Reapplied in Next PY	Dropped Out	Percent Drop Out
1998-2000	No wait list				
2001	82	38	28	16	19.5%
2002	77	8	57	12	15.6%
Total	159	46	85	28	17.6%

Source: SCE Data Response 163.

- Commitments are not always released in a systematic or timely manner. SCE will continue to honor a commitment beyond a program's performance period for customer service reasons.
 - ⇒ **Exhibit IV-39** provides an overview of SCE's process for reviewing and releasing commitments for selected large programs.

Exhibit IV-39: Commitments are Monitored and Released

Program	Commitment Monitoring Process	Release of Commitments
Residential New Construction	<ul style="list-style-type: none"> ▪ SCE's implementation contractor would contact builders every 90 days for construction status and report information to SCE. ▪ Beginning in 2002, SCE has the option of requiring proof of project viability for large projects or if construction lags. 	<ul style="list-style-type: none"> ▪ Builder agreements required completion within specified time frame. ▪ For PY 2002, builders to be notified two months before applications expire.
SBD	<ul style="list-style-type: none"> ▪ No consistent approach. Each new construction rep developed their own methodology to for tracking and following-up on projects. ▪ Beginning in 2001, bi-weekly reports were provided to management for review. 	<ul style="list-style-type: none"> ▪ According to SCE, commitments are released if SCE is notified of project cancellation or allowed time frame has elapsed.

Program	Commitment Monitoring Process	Release of Commitments
Large and Small SPC	<ul style="list-style-type: none"> In 1999, SCE developed SPCTrack, a proprietary database which tracks the status of each project, including days since last event. No information on how frequently this information was reviewed was provided by SCE. SPCTrack contains information on projects beginning with PY 1998. 	<ul style="list-style-type: none"> Applicant withdraws project. Time limit for submittal of detailed application expires, or no progress made by applicant in supplying required information. Commitment drop is authorized by project manager. (As discussed later in this report, projects are not automatically dropped if a contract deadline is not met.)

Source: SCE Data Responses 229 A (residential) and 229 B (nonresidential); blueCONSULTING Analysis of SPCTrack database; and follow-up interview with SPC Program Manager.

- ⇒ Although the performance period for the 1998 Residential SPC program expired on July 31, 2000, as of December 31, 2002, SCE still maintained \$2.2 million in commitments associated with two EESPs. \$3.4 million of commitments associated with PY 1999 non-residential programs remained outstanding at December 31, 2002.
- ⇒ Builder Agreements for the Residential New Construction program required completion within a certain time frame. According to SCE, at the end of each program year, as part of the budget process for the following year, outstanding commitments were reviewed and released. blueCONSULTING was not able to verify this within the audit time frame.

C26. SCE's resource planning and procurement practices are inadequate. SCE does not utilize appropriate criteria when making initial outsourcing versus in-house decisions; although consistent with stated Corporate policy, SCE's contractor and vendor selection processes do not promote competitive selection.

In-House versus Outsource Decisions

- Consistent with the Commission's goal of transferring program implementation away from the utility administrators, SCE outsources a large portion of its energy efficiency program delivery activities. Tasks performed by external resources vary from routine clerical functions, such as processing residential rebate applications, to highly technical functions, such as the review of architectural plans and building designs. The amount of outsourcing varies by program. Using the sample programs as an illustration, **Exhibit IV-40** provides a comparison of in-house versus outsourced activities for each program.

Exhibit IV-40: For Sample Programs, the Majority of the Program Delivery Activities Were Outsourced

Program	Activities Performed by Suppliers	Activities Performed by SCE
Appliance Recycling	Appliance Recycling Center of America (ARCA) performs all program delivery service including: <ul style="list-style-type: none"> Scheduling, Appliance pick-up and recycling, Payment of customer incentives, Customer satisfaction surveys. 	<ul style="list-style-type: none"> Manage ARCA. Advertising. Review and payment of ARCA invoices and monthly reports. Internal reporting of program progress.
Residential Energy Surveys	Surveys performed by contractors. Conservations Services Group (CSG) performs in-home and phone surveys, Xenergy implements mail in and on-line surveys. Activities include: <ul style="list-style-type: none"> Solicitation, Implementation, Processing, and Energy analysis. Software developed by external consultants	<ul style="list-style-type: none"> Manage contractors. Review and payment of contractor invoices and monthly reports. Internal reporting of program progress.
Express Efficiency	<ul style="list-style-type: none"> Verification and inspection functions. Application processing. 	<ul style="list-style-type: none"> Manage contractors. Review and payment of contractor invoices and monthly reports. Internal reporting of program progress.
SPC	Alternative Energy Systems Consulting (AESC), Schiller/Nexant, SBW serve as technical consultants. Activities include: <ul style="list-style-type: none"> Review of all program applications, Recommendations for acceptance, Inspections, Review of energy savings reports and invoices, and Maintenance of internal systems to track applications. 	<ul style="list-style-type: none"> Manage contractors. Program tracking (SPC database). Review and sign-off on applications and incentive payments. Review and payment of contractor invoices and monthly reports. Internal reporting of program progress.
SBD	<ul style="list-style-type: none"> Design assistance (Geopraxis, Quest Energy). Energy use analysis. Development of informational products (James J. Hirsch). 	<ul style="list-style-type: none"> Manage contractors. Review design assistance deliverables. Review and payment of contractor invoices and monthly reports. Internal reporting of program progress.

Source: SCG and Xenergy Contracts (Data Response 127); SCE Data Response 129; Schiller, SBW Consulting, and AESC Contracts (Data Response 131); James J. Hirsch, Geopraxis and Quest Energy Contracts (Data Response 130).

- During the audit period, in-house versus outsource resource decisions were not part of a formal evaluation process, and were not focused on cost efficiencies. While in most industries low cost is a critical decision factor in the performance of all functions, especially in routine processing activities, the lowest cost alternative was not given a critical weight in the decision making process at SCE.

⇒ Neither the Express Efficiency Rebate processing center nor the Residential Rebate processing center had performed formal cost-benefit analyses to support the in-house vs. outsource decision or the decision to maintain separate rebate processing centers.

⇒ In the case of the Express Efficiency processing center, no formal labor cost-benefit analysis was conducted. According to SCE, “while direct hourly labor costs of contract personnel [are], on average, about 20 [percent] higher than the direct hourly labor costs of a full-time SCE personnel in the same job category, the higher cost is

offset by the efficiency and flexibility gained by being able to adjust the size of the workforce in response to fluctuating workload.”

- ⇒ Formal cost/benefit analysis was not performed in the selection of the three large SPC vendors (Schiller/Nexant, SBW Consulting and AESC). In other instances, SCE reports that qualitative (not quantitative) assessments of consultant performance and relative cost effectiveness were major components in the consideration of continued consultant use.
- SCE’s rationale for outsourcing vs. in-house decisions is out-dated and looks to past actions of the Commission, as opposed to assessing the present or future environment. While some of this rationale may still be relevant, reasons such as rapid time frame for implementation and the uncertain nature of the continuation of the program is no longer a relevant factor for mature, successful (and in some cases statewide) programs. SCE’s stated rationale for outsourcing vs. in-house decisions include:
 - ⇒ the uncertain nature of the continuation of the programs and utility administration,
 - ⇒ the need to adjust staffing to seasonal work loads,
 - ⇒ the complexity of the program and the specific technical expertise required, and
 - ⇒ the aggressive time frames established by the Commission to produce operational programs.

Vendor Selection

- SCE has a corporate Procurement and Materials Management (PAMM) policy which addresses the ordering of materials and services.
 - ⇒ SCE’s corporate procurement policies require that competitive bidding be used whenever practical and awards should normally be based on the lowest evaluated costs to the Company taking into consideration relevant commercial and technical criteria.
 - ⇒ While competitive bidding should be used for the majority of procurements, the policy does allow procurement on a noncompetitive basis from a specific source as described below:

Exhibit IV-41: SCE's Policies Allow Noncompetitive Procurement

Type	Description
Single Source	Only currently available source to meet necessary requirements.
Selected Noncompetitive	Award made to supplier selected by PAMM for convenience, when dollar value and experience indicate competitive bidding procedures would not be practical or economical.
Directed	Award made to user-designated supplier when alternate sources are available, based on practical reasons with appropriate substantiation and supporting documentation.

Source: PAMM Procedure Number 37.030.040 (Data Response 127).

⇒ Where noncompetitive procurement is employed, the requisitioner is responsible for documenting and substantiating reasons for noncompetitive bidding. The requisitioner is also required to allow sufficient time to permit competitive bidding.

- During the audit period, the process for selecting contractors and vendors did not promote competitive selection. Competitive bidding was infrequent, with significant vendors having sole-source contracts throughout the audit period.

⇒ While expenditure approval levels are well documented and followed, approval levels, specifically for sole-source vendor selections and purchase order extensions and changes, are insufficient to discourage sole source contracting. The Senior Vice President of the CSBU can authorize these contracts up to any limit, as shown below.

Exhibit IV-42: Confidential Exhibit - Redacted

⇒ The process for selecting contractors and vendors was highly judgmental. SCE's stated rationale for sole-sourcing vendors was consistently "[n]o other supplier is known to have the capabilities to meet specified program requirements." Program management selects and engages vendors based on industry reputation and/or past work with SCE or other utilities. Sole-sourcing was common, as were contract extensions.

⇒ During the audit period, approximately \$130 million (40 percent) of all program expenditures (exclusive of commitments) were made to external vendors. blueCONSULTING examined all vendors with over \$1 million in payments during the audit period and found that over 60 percent of the dollars expended were done so on a sole source basis, as shown in **Exhibit IV-43**.

Exhibit IV-43: Confidential Exhibit - Redacted

Contract Management

- Relationships with vendors lasted numerous years. There is, for example, no competitive bidding process on a time-staged basis (annual, bi-annual or tri-annual basis), as is the practice in most large companies with significant external procurement. For all vendors, purchase orders were often subject to change orders (CO) that materially increased the amount of the sole-sourced contract.

⇒ Based on the results of our transaction testing, blueCONSULTING selected certain purchase orders for follow-up review. **Exhibit IV-44** provides SCE's rationale for change orders extending selected purchase orders over multiple program years.

Exhibit IV-44: Confidential Exhibit - Redacted

C27. Contractor and vendor monitoring is inadequate. SCE has no direct processes to ensure the work has actually been performed by the vendor for certain programs. As a result, SCE exposes its programs to potential abuse.

- The contractor and vendor monitoring, controlling and verifying processes rely largely on reviews of documentation and office-based meetings.
 - ⇒ Progress meetings are held with vendors on a regular basis. Discussion topics include progress against goals, project status, and open issues.
 - ⇒ Vendor documentation, such as reports and invoices, are extensively reviewed, as discussed in Conclusion No. C29. The documents are typically prepared by the contractors/vendors.
- Direct verification or independent confirmation that the vendor work was performed is limited. The lack of direct processes creates an opportunity for a careless or unscrupulous vendor to provide a compelling, but phony, paper trail and receive payment without ever having done the work.
 - ⇒ ARCA performs “self inspections.” SCE staff visit the recycling center twice a year, on a pre-arranged basis.
 - ⇒ Virtually all functions are outsourced in the Residential Surveys program. No direct work is performed to ensure that the surveys have actually been mailed and returned.
 - ⇒ Application review and inspections are outsourced for the SPC program. While phone and in-person review of vendor prepared documentation is extensive, and the SPC program manager signs the reviewer recommendations, no direct work is performed to ensure that inspections have actually been performed by the vendor.
 - ⇒ The Savings by Design program staff extensively reviews deliverables produced by contractors. A SBD staff member may also (but not necessarily) visit the customer site. While phone and in-person review of vendor prepared documentation is extensive, no direct work is performed to ensure that the work has actually been performed by the vendor.
 - ⇒ SCE's Small Hard-to-Reach program is a direct install lighting program implemented by two contractors. SCE pays the vendors based on the number of measures installed. Installed quantities are reported by the contractors. SCE has worked with these vendors in the past and relies on the vendors' reputation to ensure that lists of installed measures are not inflated. SCE's contracts allow SCE to inspect

installations, and SCE has visited installation sites; however, this direct review is infrequent and not part of a monitoring program.

- As discussed previously, Customer Satisfaction and M&E studies provide only limited assurance that irregularities, if any, would be detected.

C28. Controls and monitoring of on-site inspections, when performed, are adequate. However, discretionary overrides of programs selected for inspection diminishes the overall effectiveness of the controls.

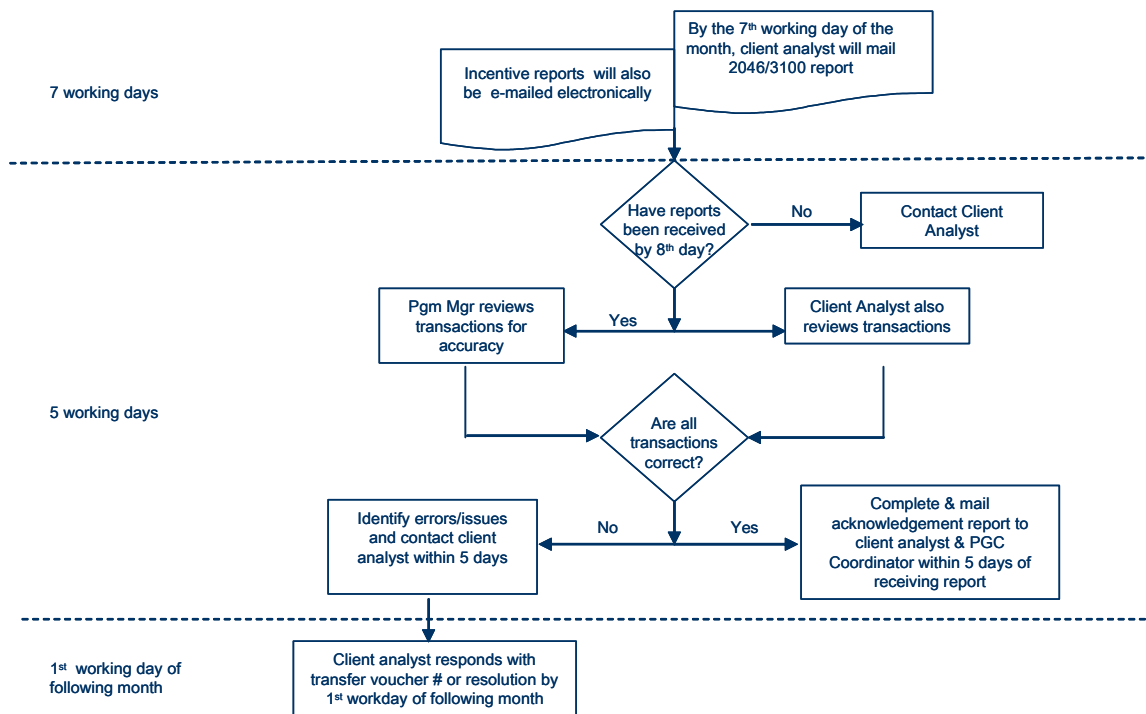
- Certain programs require inspections of work performed, and the extent of the inspection varies according to the program design. The range of inspections varies from programs for which inspections are not relevant (e.g., On-Line Surveys), to ones requiring extensive inspection (e.g., Savings by Design, SPC). On-site inspections are performed by either internal SCE staff or outside contractors and vendors.
- Projects for programs not requiring 100 percent inspection are selected for inspection in various ways. The Residential Rebate and Express Efficiency programs have automated systems which “randomly” select projects for inspection. However, these systems allow certain staff to override any project selected and substitute another. Inspection targets are not built into the system and must be input by the processors for each batch processed. The system will allow processors to input zero percent and no projects will be selected for inspection.
- Where inspections (contractor or engineering inspections) are required, these on-site inspections are performed in accordance with program guidelines and documentation, including selection of qualified inspectors, selection of programs/transactions for inspection, and review of inspection documentation, particularly prior to payments.
 - ⇒ There are defined SCE internal procedures relative to inspections. All programs requiring inspections had conducted inspections. For these programs, inspection targets had been set internally by program management and those targets were generally met or exceeded.
 - ⇒ Systems and processes are in place to automatically select transactions for inspection and to suspend payments pending these inspections for the Residential Rebates and Express Efficiency programs. Overrides, however, are at the discretion of non-managerial rebate processing staff, with no audit trail or review of overrides.
- When program inspections are outsourced (such as SPC), SCE’s program staff does not monitor the inspectors to ensure the inspections were performed.

Accounting and Cost Tracking

C29. SCE Program Managers have been assigned considerable responsibility for the review and approval of program costs and accounting, which they discharge effectively. Program-level review of expenditures is timely and comprehensive. Program expenditures are extensively monitored before, during and after the invoice payment process.

- Invoices received by the Accounting Department are sent to Program Managers for approval. Additional approvals from higher management personnel are received in accordance with the approval matrix.
- Detailed transaction reports are created by the financial systems. They are extensively reviewed, and timely corrections are made if necessary. Program Managers and finance staff review transaction reports on a monthly basis to confirm the expenditures are acceptable. If incorrect entries are detected, a correction is submitted for processing. **Exhibit IV-45** provides an overview of the review process.

Exhibit IV-45: SCE Program Managers Are Responsible for Reviewing Program Accounting



Source: SCE Data Response 68.

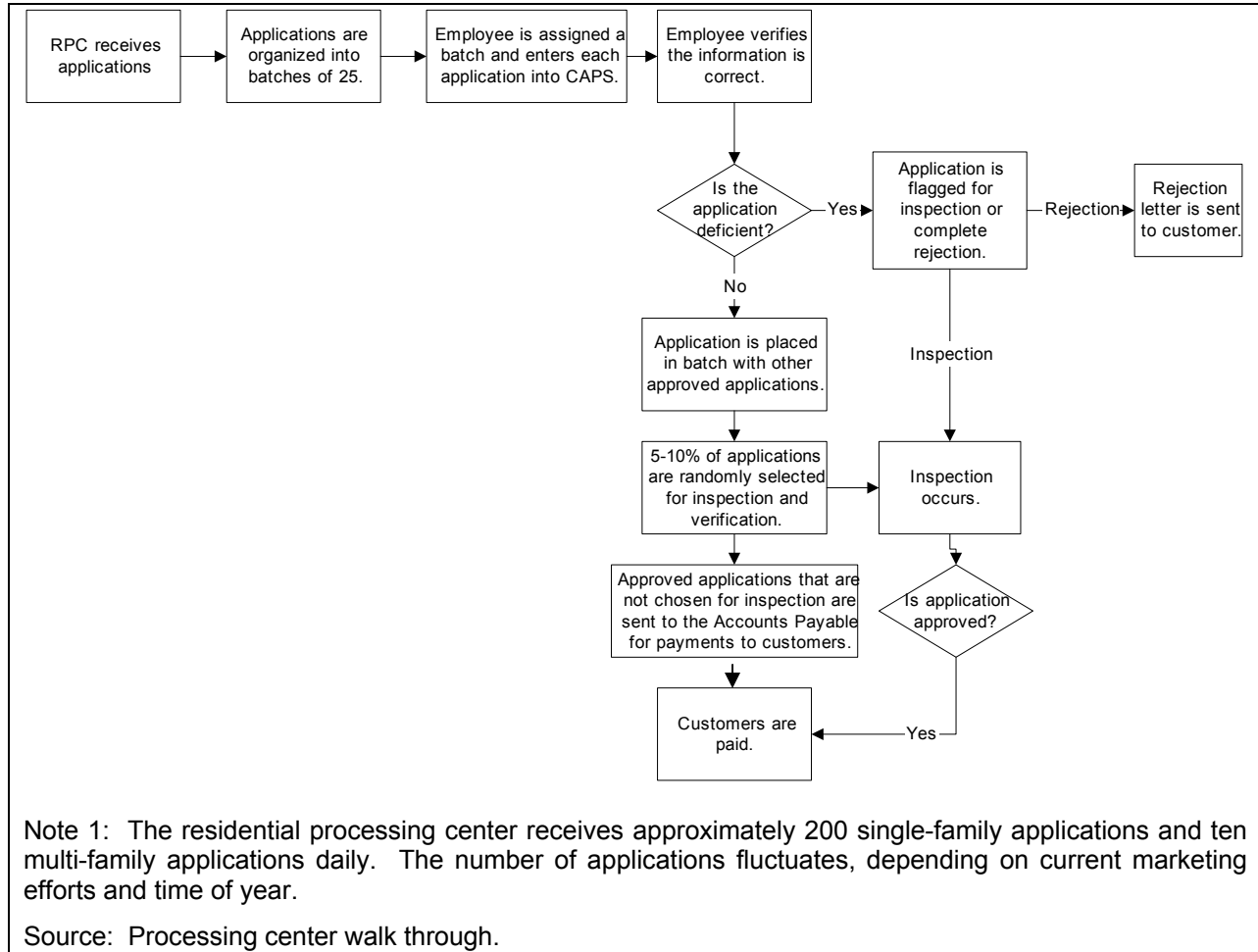
⇒ Program Managers review the reports, complete the acknowledgement form and return it to the responsible CSBU Finance Analyst within five business days. If a Program Manager does not respond within five days, the Finance Analyst contacts the Program Manager to confirm no corrections are necessary.

- ⇒ If there are errors on the reports, the Program Manager uses the acknowledgement form to communicate the problem to the Finance Analyst.
- ⇒ The Finance Analyst resolves the problem and tells the Program Manager corrective action has been taken. This report is also sent to energy efficiency management and any other personnel deemed by management as responsible for reviewing changes.
- blueCONSULTING's review of accounting transactions evidenced the review and correction of program accounting. Questioned program costs had frequently been contemporaneously identified and corrected by program management or finance staff.

C30. While controls over rebate application review and payment procedures are adequate, these processing functions are redundant and inefficient.

- SCE maintains two rebate processing centers within the CSBU, one for residential (which performs multiple processing activities) and one for non-residential (Express Efficiency). The programs have similar processing functions, but each center utilizes a different processing system.
 - ⇒ Prior to 1999, Express Efficiency Rebate processing and Residential Rebate processing had been performed in one center. According to SCE, the processing was separated into two centers in 1999 due to the more complicated nature of the programs. **Exhibit IV-46** (following page) provides an overview of the residential single family rebate process. The multi-family program has a similar process, except applications are sent to the Program Manager to confirm that a reservation for funds was made. If no reservation was made, the application is rejected. If a reservation for funds was made, the application is sent back for processing, and is processed in a manner similar to that shown in **Exhibit IV-46**. Express Efficiency rebates are processed in a separate center using a different system (the Express system being newer); however, the high-level processes and processing are basically the same as those for the residential rebates.
 - ⇒ Each program processes its information in a proprietary tracking database. There are limited shared processing tasks or systems among programs, or across organizational silos (residential/non-residential).
- There are both manual and system controls to ensure application review and payment processes are adequate. Extensive reports are produced by both the proprietary databases and by corporate level financial systems. These reports are available daily, weekly, bi-weekly, monthly and annually.

Exhibit IV-46: Residential Rebate Processing (Single Family)
[Note 1]



Compliance

C31. SCE has established program-specific procedures to verify participant eligibility.

- Systems are in place to automatically verify a customer's eligibility for the Residential Rebate and Express Efficiency programs. These systems also track customer history to ensure limitations are enforced.
- SCE's SPC tracking system verifies customer eligibility.
- A customized system (ARCATS) has been developed to verify customer location and eligibility for the Refrigerator Recycling program. ARCATS performs automated tests for key characteristics, such as customer eligibility and rates. ARCA also reviews participant eligibility. ARCA receives monthly data base updates with SCE eligible customers. This information is placed in ARCA systems so that eligibility can be verified. ARCA confirms participant and appliance eligibility, and provides detailed reports to SCE which are input into ARCATS.

- Copies of SCE's eligible customer data base are provided to Residential Energy Survey implementation vendors. This information is utilized to verify eligibility and to select customers for mailing.

C32. SCE has departed from program rules for purposes of customer service; however, this is done on an exception basis rather than as a practice.

- For each year, SPC program rules specify program end dates. **Exhibit IV-47** provides a list of projects for which extensions were granted beyond those dates. For PY 1999, Measurement & Verification (MV) 2 reports should have been submitted by the date of our testing (October 2003). For PY 2000 and 2001, MV1 reports should have been received.

Exhibit IV-47: SCE Granted its SPC Program Participants Extensions for Customer Service Purposes

PY	Deviation	Instances
1999	Extension granted. MV2 under review as of 3/31/04	2
	Extension granted. Project completed after 10/03.	3
2000	Extension granted. MV1 under review as of 3/31/04	1
	Currently working with customer.	20
	Sponsor out of business. Contract transferred to customer. Currently working with customer.	1
	MV1 received after database received.	2
2001	Currently working with customer.	9
	MV1 received after database received.	2

Source: March 24, 2004 Follow-up Interview with SPC Program Manager, Exception emails.

- Our transaction testing identified one instance of deviations from program rules for Express Efficiency. A customer applied for the 2000 Express Efficiency program, but funds were fully committed and the customer was placed on a wait list. When funds did not free up, the applicant was paid out of PY 2001 funds. Interviews confirmed that this may have occurred in other isolated cases.

C33. SCE has established processes to address compliance with SPC rules.

- The SPC program is documented in statewide program manuals for each program year. These manuals describe program requirements and limitations, processes and procedures, rebate levels, time lines, performance measurement and other additional relevant information, and were available on the utilities' web sites. SPC program rules are summarized in Appendix B.
- SCE's technical consultants review each application to ensure that it complies with site caps, that the project's total cost is reasonable, and that the proposed rebate is within program guidelines. For PY 2002, the reviewers also confirmed that lighting projects also included savings from at least one other end use.

- SCE has developed a proprietary database, SPCTrack, which is used to track applications and projects, and to facilitate compliance with program rules.
 - ⇒ To maintain compliance with both the sponsor cap and the utility affiliate cap rules SCE periodically runs queries against the databases to ensure reserved funding does not exceed caps. Each sponsor is assigned an ID to facilitate this tracking.
 - ⇒ SPCTrack stores project information at the site level and runs queries to ensure site caps are not exceeded.
 - ⇒ SPCTrack independently calculates incentives.
 - ⇒ SPCTrack checks customer eligibility.
- Compliance with state-wide corporate limits was monitored jointly by the three utilities.
 - ⇒ Initially, in order to maintain compliance with this rule, the utilities established a "master list" containing information on project size for each project accepted by one of the utilities. This list was maintained as an Excel spreadsheet. It was circulated among the three utilities on a monthly basis or more often if warranted.
 - ⇒ In 2000, the three utilities developed a different approach to monitoring the statewide funding limitations, whereby each utility limited itself to one-third of the statewide limit. This process was used through 2002.
 - ⇒ No violations of statewide caps were identified by our testing.
- SCE's SPC engineering and design contractors verify total project cost in order to ensure compliance with program requirements. SCE has four check points that it uses to confirm incentives do not exceed project cost caps.
 - ⇒ Application review by SCE contractors (external reviewers).
 - ⇒ SPC Program Manager review of incentive calculations performed by external reviewers.
 - ⇒ Input into SPCTrack. SPCTrack automatically calculates incentive levels. As a part of that process the project cost is applied.
 - ⇒ Beginning in 2002, computer-driven contract creation was implemented. Incentive amount is adjusted as necessary to account for project cost and caps.
- Before issuing a check, SCE program staff review sponsor invoices for correctness and sign off on the check request.

C34. With the possible exception of documentation and application requirements, SCE's SPC program was in compliance with Commission and program rules during the 1998-2002 audit period.

- Selected SPC program rules are provided in Appendix A.
- During the 1998-2002 audit period, SCE complied with program rules related to incentive caps, as shown in **Exhibit IV-48**.

Exhibit IV-48: SCE Complied with SPC Program Rules [Note 1]

	1998	1999	2000	2001	2002
Project Sponsor Caps	✓	✓	✓	✓	✓
Affiliate Caps	NA	✓	✓	✓	✓
Customer Site Caps	✓	✓	✓	✓	✓
Corporate Parent Caps [Note 2]	NA	✓	✓	✓	✓
Payment Schedule	See discussion below				
Double Dipping (within program)	✓	✓	✓	✓	✓

✓ = Compliance No= Non-Compliance NA = Not Applicable

Note 1: These tests were performed for the population of SPC applications using SPCTrack.

Note 2: In 1999, the three utilities devised a procedure for tracking statewide caps. An excel spreadsheet was circulated among the utilities. Each utility would update its activity since the previous report. The spreadsheet accumulated the committed incentives based on taxpayer ID number to calculate running totals. Beginning in 2000, the utilities limited themselves to 1/3 each of the statewide cap.

Source: blueCONSULTING Analysis.

- ⇒ Affiliate caps were not exceeded. **Exhibit IV-49** provides details of all utility affiliate participation in SCE's SPC program during the 1998 – 2002 time frame. Affiliates of utilities other than Edison are provided for informational purposes only.

**Exhibit IV-49: No Affiliate Caps Were Exceeded
(Dollars in Thousands)**

	1998	1999	2000	2001	2002
Affiliate Cap	No Cap	\$4,525 (large) \$225 (small)			
Affiliate Participant	Edison Source	PG&E Energy Services	None	SCG	Sempra Energy Solutions
Application/ Reservation Amount	\$1,986	\$81		\$25	\$53

Source: blueCONSULTING Analysis.

- Our review of files evidenced that project sponsors were notified when they had reached the sponsor cap and subsequent projects were rejected.

- Of the 39 files reviewed in detail, one contained no customer affidavit, and one contained a typed signature. SCE staff reviewed and signed off on each of the submissions included in our review of sample projects.
- Our review of SPCTrack identified no instances where rebates were received for the same improvement in multiple years, or frequent customer reapplications.
- In 1998, SCE refunded the \$250 non-refundable deposits.
- Although the process by which SPC payments are made creates a potential for overpayment when actual energy savings are considerably less than planned, over the five year audit period only \$78,000 of payments were made for which final savings were not realized. SCE is in negotiation with certain of these projects to obtain refunds.

⇒ Details of the \$78,000 are provided in **Exhibit IV-50**.

Exhibit IV-50: SPC Payments for Projects Not Completed Totaled Only \$78,000

Project ID/ Project number	PY	Amount Paid	Amount based on Verified Savings	Difference (Overpayment)	Discussion
200 266	1998	36,395	0	(36,395)	Projects were installed and initial payments were made. Project sponsor subsequently went bankrupt. Projects were written off.
277/39	1999	9,690	0	(9,690)	Project withdrawn.
482/5	2000	11,202	0	(11,202)	Sponsor out of business.
778/85	2000			(5,396)	Revision in MV2.
699/66	2000	35,459	\$20,207	(15,252)	Actual savings were significantly less than contract savings. SCE in dispute with customer to get excess money back.
Total		\$92,746	\$20,207	(\$77,935)	

Source: March 24, 2004 Follow-up Interview with SPC Program Manager, Exception emails.

⇒ From 1998-2000, participants were paid 40 percent of the estimated project savings upon installation. Following completion of the first year of measurement, a second payment is made based on the measured savings (70 percent of the measured savings less the amount already paid). Estimated savings are frequently considerably higher than measured savings. As a result, it is possible that customers may owe the utilities money after savings are measured. **Exhibit IV-51** shows the final disposition of those customers for whom refunds were due following the first year of measurement.

Exhibit IV-51: Refunds Due at MV1 Are Typically Resolved

	Total Projects Funded	Amount due back to SCE at MV1	Amount Due Back to SCE at MV2	Potential Overpaid
PY 1998	63	21	3	1
PY 1999 large only	137	19	5	5
PY 2000 large only [Note 1]	25	2	2	2

Note 1: Includes only those projects that had submitted an MV2.

Source: blueCONSULTING Analysis based on SPCTrack.

C35. Controls over potential “double dipping” exist, but are manual in nature.

- Double dipping refers to the receipt of incentive payments from more than one source for the same energy savings activity or project. Examples of “double dipping” rules include:
 - ⇒ The 1998 SPC program manual required that “[Energy Efficiency Service Providers] EESPs shall not apply for or receive any rebates, incentives, or financial assistance from other California Utility or CBEE programs, pilots, or demonstration projects for measures installed under the SPC program.”
 - ⇒ A project receiving incentive funds in the Large Customer Standard Performance Contract (LCSPC) program is not eligible to receive incentive funds in from any other program using PGC funds or gas DSM surcharge funds.
- Reports from the Savings by Design, SPC and Express Efficiency programs are compared on a monthly basis by program managers. The reports provide a manual, line-by-line comparison to detect duplicate names, locations and/or customer numbers. Items appearing as potential duplications are explored by program management and resolved.
- In certain program years, SPC and Express Efficiency program eligibility were non-overlapping and determined by rate class. This facilitated the determination of eligibility for each program.
- The lack of integrated program systems/data bases precludes automated checking of these items, increasing inefficiency and likelihood of error into the system.

5. Recommendations for the Company:**R4. The charter of the Internal Controls function should be reviewed, and the work of Internal Audit should be expanded. (Refers to Conclusion No. C19)**

- PGC Balancing Account Reviews, discontinued after PY 2001, should be reinstated.
- Functions and processes of the programs, particularly those with financial control components, should be reviewed. Formal reports should be presented to Management for corrective action.

- Reviews of program management and management controls should be performed.
- R5. The assignment of processing duties should be reviewed and modified to preclude the possibility of the same individual controlling all phases leading to payment of incentives. The practice of having checks returned to program staff by accounts payable should be discontinued. (According to SCE, a procedure has been implemented to ensure incentive checks are mailed directly from SCE Accounts Payable to the recipient.) (Refers to Conclusion No. C20)**
- R6. The criteria for outsourcing vs. in-house processing decisions should be reviewed and updated to reflect the status of mature programs. (Refers to Conclusion No. C26)**
- The use of contract staff for nearly all processing should be reconsidered. SCE cites the uncertain nature of program continuation as a reason for using contract staff for processing functions. However, due to the long tenure of some programs (such as rebates), program continuation should not be a significant factor for outsourcing decisions.
 - SCE also notes the Commission's need for quick program implementation as a reason for outsourcing. However, the Commission's need should not be considered rationale for mature programs.
 - Costs should be a more significant component in the decision criteria, and cost-benefit analyses should be periodically performed.
- R7. The contractor and vendor selection process should include more frequent competitive bidding. The practice of extending the term and/or increasing the contract costs through frequent change orders should also be reconsidered. The approval authority limits and/or processes for sole-source contracting and for purchase order changes should be lowered to make current practices more visible within the organization. (Refers to Conclusion No. C26)**
- R8. Contractor and vendor monitoring and verification processes should be strengthened by the development of direct processes to ensure that the work was actually performed. (Refers to Conclusion No. C27)**
- Perform field verification (using SCE employees) to ensure vendor work is performed.
 - If the Customer Satisfaction and M&E processes are to be relied upon as a mitigating control, then the organizations responsible for these processes must: control the databases utilized to ensure the entire population is available for random selection; and document and follow up on negative responses independent of the program team.

R9. Consolidation of processing functions, centers and systems should be comprehensively reviewed in 2004. (Refers to Conclusion No. C30)

- Consolidation of processing functions and centers provides for economies of scale in terms of management and oversight and shared overhead expenses, as well as promoting common technological advancements. In 2004, SCE plans to evaluate integrating certain residential and nonresidential processing activities into one center (Low Income Energy Efficiency, Energy Efficiency and Demand Response Program).
- The scope of the review planned for 2004 should be more comprehensive. The review should include all common processing functions, such as vendor payment tracking, rebate application review and payments, determination of participant eligibility, and any other considered relevant.
- Integrating processing functions is a norm in many industries. SCE should look externally to other utilities and also to other industries, such as banking or mutual funds, for examples of integrating complex and diverse program support into one processing center.
- The review should include all programs and cross organizational silos to include residential and non-residential programs.

R10. As part of the consolidation review, the use of multiple tracking systems/databases should be reconsidered. (Refers to Conclusion No. C30)

- Each program has a separate, customized tracking database, not necessarily on a common technology platform. These programs are not necessarily compatible for certain information sharing control checks, such as for double-dipping. Multiple programs can create additional development and maintenance overhead expenditures, as well as preclude management review efficiencies.
- The system in use at the Express Efficiency Rebate center should be reviewed as a possible replacement for (or model for expanded capabilities in) CAPS.

R11. The discretionary overrides of programs selected for inspection and the lack of an audit trail or review of the overrides should be reviewed by the CSBU Internal Controls function. (Refers to Conclusion No. C28)

6. Policy Issues for the Commission:

None.

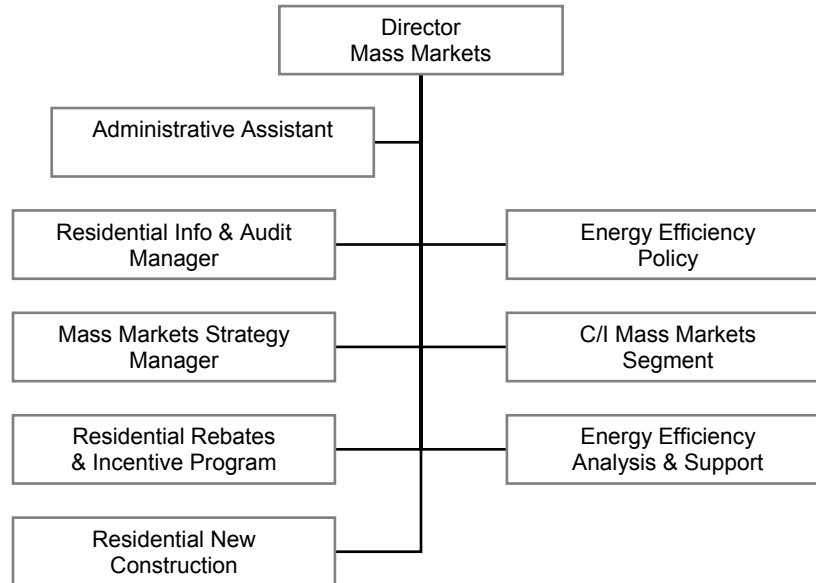
E. SDGE

1. Background

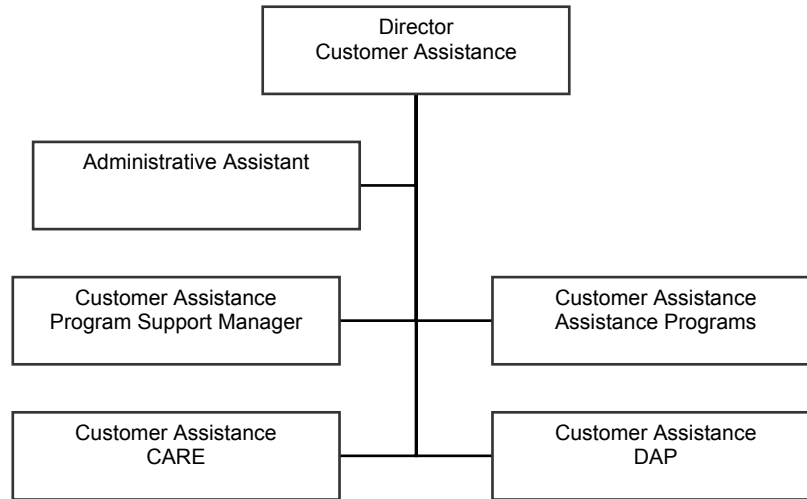
There are currently three Director level organizations that comprise the SDG&E Energy Efficiency Organization: 1) Mass Markets; 2) Customer Assistance; and 3) Commercial and Industrial Assistance. Mass Markets and Customer Assistance report to the Vice President – Customer Service Mass Markets. Commercial and Industrial Markets reports to the Vice President – Customer Service Major Markets. **Exhibit IV-52** shows the responsibility assignments within each of these organizational units. Prior to the operational integration with SCG in April 2001, there was a slightly different organization.

Exhibit IV-52: Energy Efficiency Organization

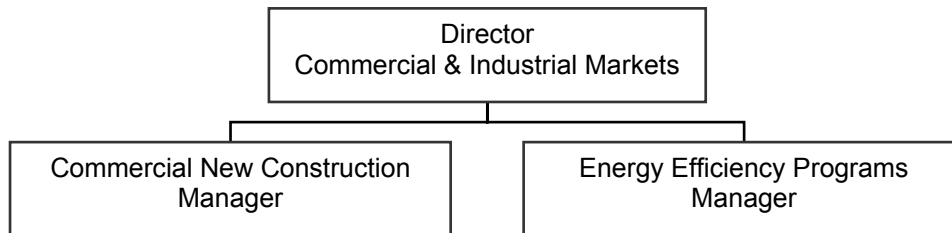
Mass Markets



Customer Assistance



Commercial & Industrial Markets



Source: SDG&E DR DW-004 and Verification Meeting, April 9, 2004.

Following Integration, there were approximately 94 individuals in the SDG&E Energy Efficiency organization. Some had assignments in other areas, resulting in about 86 full time equivalent employees. However, as discussed in Chapter V, there were also a number of individuals assigned to cost centers other than Energy Efficiency who supported the energy efficiency program during the audit period.

The following is a brief description of the responsibilities of the employees in the energy efficiency organization:

- **Director:** Has overall responsibility for department management and achievement of program goals.
- **Manager/Supervisor:** Has overall responsibility for management and achievement of several programs and program goals.
- **Administrative Assistant:** Provides general office support to all staff.

- **Program Advisor:** Provides program policy guidance in the implementation of programs; coordinates regulatory requirements with the Regulatory department.
- **Program Manager/Program Analyst:** Has overall responsibility for program operations and achievement of program goals, particularly energy and peak demand savings. These activities include program design and budget preparation; overseeing of program operations including the development of program procedures; program promotion; program data processing; customer communications; contracting and procurement for program services as needed; working with market suppliers, vendors, trade organizations and other industry-related organizations; working with community-based organizations; budget tracking and reporting of program activities; and supervision of program implementation staff.
- **Program Assistant:** Has responsibility for providing various levels of assistance to the program manager. This assistance includes providing information to and processing customer requests, working with outside vendors involved in the program, budget tracking and preparation of reports, assisting in the development of program procedures; data entry and other computer functions; maintaining filing and data systems; verifying program applications and files; resolving discrepancies; preparing communications with customers, vendors and internal company staff.
- **Energy Program Representative/Account Executive:** Has responsibility for working with customers, HVAC, lighting, and motor dealers, and architectural and engineering firms to achieve installations of energy efficient equipment for retrofit or new construction customers; explains program requirements; acts as a one-stop focal point for assisting in program participation; analyzes financial and other benefits to program participants; ensures that vendors and contractors are providing quality services to customers in accordance with established program guidelines and procedures.
- **Energy Information Representative:** Provides assistance to residential and commercial customer requests and inquiries concerning energy conservation and energy efficiency programs, schedules in-home audit requests; gives advice to customers on which programs and/or services will most benefit customers; acts as a consumer advocate; advises customers on efficient and economical energy usage; conducts follow up with customers to measure implementation of recommendations and to ensure customer satisfaction; conducts telephone audits with customers, analyzes results and discusses recommendations; provides pre- and post-audit clerical support as needed; sends out energy efficiency brochures and collateral to customers.
- **Engineer:** Serves as the technical expert in various engineering fields (e.g., HVAC, lighting systems, process and new construction) and provides innovative solutions to customer problems; evaluates customer projects for energy and demand savings potential; estimates project costs to own and operate various energy efficient systems.

- **Business/Economic Analyst (includes Senior and Principal):** Responsible for measurement and evaluation of energy efficiency programs, including market effects studies and studies to demonstrate energy and demand savings; provides supporting analysis required for developing programs; assists in the design of program tracking systems; provides program-specific technical assistance for measurement and verification plans for complex projects such as Standard Performance Contract projects; prepares data and analysis for cost effectiveness and regulatory reporting requirements. Other economic/business analysts are responsible for budgets and expenditure tracking and reporting.
- **Energy Auditor:** Responsible for performing surveys for residential and nonresidential customers to identify energy efficiency opportunities at the customer site; determines costs of new products to achieve recommended savings and provides customers with survey reports outlining simple paybacks; provides customers with information on potential financing options, vendors, rebate opportunities, and other information related to SDG&E's energy efficiency programs.
- **Quality Control Supervisor:** Has overall responsibility for management of inspector staff and ensuring the quality of inspections.
- **Quality Control Inspector:** Verifies installations of energy efficient equipment for residential and nonresidential programs; works with program managers to develop effective quality control procedures.
- **Accounting Coordinator:** Provides assistance to program managers by ensuring that expenditures and payments to customers and others are properly accounted for and documented to support program goals; verifies payment requests for accuracy and completeness per contract terms; ensures that all payment documentation is properly maintained; audits files to ensure that policies, procedures and terms and conditions of contracts are met; acts as point of contact for vendors for monitoring and processing invoices and vouchers for payment; resolves billing discrepancies with inspectors and contractors; provides policy interpretations regarding accounting issues to ensure consistency in applications; assists in the reconciliation of program expenditures with company accounting systems.
- **Rebate Processing Staff:** Responsible for verifying completeness of rebate applications and compliance with program policies/requirements; data entry to SDG&E's Energy Efficiency Tracking System (EETS) of program rebate applications; prepares rebate check requests for approved applications; responsible for storage and retrieval of past program applications. EETS is an on-line database system that tracks the details of rebate and incentive program, except for Residential New Construction.
- **Clerical Support:** Provides additional staff assistance as required, e.g., opening and sorting or customer rebate applications, preparing documents for archiving and long-term storage.

SDG&E employees in the energy efficiency organization perform various functions in the administration of the Company's energy efficiency programs. The specific activities will depend on the particular characteristics of each program; however, activities can generally be described as:

- **Program marketing, advertising, and outreach:** Educating targeted market segments about the availability of rebate and incentive programs.
- **Rebate and incentive payment processing:** Receiving rebate and incentive applications, reviewing the applications to ensure their completeness and applicability, and sending payment to the applicant.
- **Inspections:** Performing onsite inspections to confirm that energy efficiency installations or project milestones have been completed.
- **Vendor management:** Identifying, investigating, selecting, monitoring and managing third party vendors charged with executing elements of specific energy efficiency programs.
- **Evaluation, measurement and verification:** Performing, or managing vendors performing onsite evaluations to measure the amount of energy savings generated through energy efficiency program efforts.

During the 1998 to 2002 audit period, the controls and procedures in place to administer the Energy Efficiency programs did not substantively change. Two events that occurred during this period with a potential effect on program controls were (i) the SAP conversion and (ii) the operational merger between SDG&E and SCG.

- **SAP Conversion:** In March 1999, SDG&E implemented SAP, a corporate system used to track all company expenditures. Prior to SAP, expenditures were tracked using a system called Cost General. While the SAP upgrade brought about operational improvements, it did not substantively change SDG&E's Energy Efficiency reporting or tracking capability. Both systems captured energy efficiency program costs, provided for high-level cost categorizations, and generated monthly reports, which the Program Managers used to manage their budgets.
- **SDG&E and SCG Operational Merger:** In April 2002, SDG&E and SCG integrated their operations. This integration resulted in personnel changes but did not have any substantive impact on overall energy efficiency program administration.

2. Summary of Adjustments

None.

3. Summary of Conclusions

Exhibit IV-53 summarizes SDG&E's accounting, oversight and controls during the audit period.

Exhibit IV-53: Summary Assessment of Accounting Oversight and Controls for SDG&E

Control Area	Adequate? (Yes or No)	Comments	Recommendation
Corporate Control Environment			
1. Management organization provides adequate direction and oversight. There is effective communication to address problems and avoid mistakes.	Yes		
2. Executive management is committed to internal control and regulatory compliance, and related compliance programs are adequate.	Yes		
3. Organization design and staff contributes to appropriate control environment. <ul style="list-style-type: none"> Separation of duties is adequate. Staff is knowledgeable and adequately trained. The utility ensures staff continuity. 	Partial	Inadequate separation of duties within EETS. EETS controls are weakened by the ability to override the systems.	
4. The internal audit function of the PGC program is adequate. <ul style="list-style-type: none"> Audits are conducted by qualified personnel. Audit plans incorporate periodic reviews of major systems, tests of regulatory compliance, and program specific audits. They provide for appropriate follow-up. Independent audits are performed in accordance with regulatory requirements. Management initiates corrective action on findings. 	Yes		
Program Design and Funding			
5. The utility's PGC personnel participate in statewide workshops and contribute to program design and reporting requirements.	Yes		
6. The utility has developed an appropriate process for timely identification of changes in regulatory requirements and incorporating these requirements into its energy efficiency programs. Commission requirements are adequately communicated to project managers, who are held accountable for compliance with Commission requirements.	Yes		
7. Procedures are in place to ensure program selection, budgeting and funding are performed within Commission guidelines.	Yes	Although fund shifting was consistent with Commission directives, opportunities were missed.	SDG&E should modify how it approaches fund shifting opportunities to be more consistent with Commission guidelines.
Program Oversight and Management			
8. Management performs effective oversight of PGC programs. Management reviews actual performance versus budgets and program goals	Partial	SGD&E Energy Efficiency Managers are not adequately held accountable for achieving program goals. Management does not effectively act on information in a timely manner.	SDG&E should incorporate the attainment of energy efficiency program goals into the Performance Reviews of Energy Efficiency Managers and Program Managers.
9. The utility has established appropriate procedures for determining committed funds, tracking expenditures against commitments and releasing commitments.	Yes		

Control Area	Adequate? (Yes or No)	Comments	Recommendation
10. PGC procurement policies are appropriate and consistent with corporate procurement policies. <ul style="list-style-type: none"> There is a formal decision-making process for outsourcing vs. in-house work. There is a competitive contractor selection process. Contractor/vendor relationships are evaluated periodically. There is compliance with purchase order approval limits. 	No	PGC programs deviated from corporate policies related to competitive bidding and separation of duties. There is no formal process by which outsourcing versus in-house decisions are made and for vendor relationships to be re-evaluated on a periodic basis. No clear policy requiring contracts with vendors.	PGC program management should modify the procurement policy related to contract requirements to strengthen controls regarding competitive sourcing and promote careful consideration of in-house versus outsource decisions.
11. Contractor oversight and monitoring is adequate. <ul style="list-style-type: none"> The Energy Efficiency group has established procedures to monitor and control contractor activities. Work performed by contractors is monitored and verified. Contractor/vendor invoices are reviewed to ensure accuracy. 	Partial	Could not confirm that the Procurement Best Practices document was disseminated to energy efficiency staff.	Procurement policies should be disseminated to all Energy Efficiency staff regardless of purchasing authority.
12. On-site inspections are performed as appropriate.	No	EETS allows Voucher Processors to override system-selected inspections by replacing the Inspection Request Date with the word "Skipped".	Systems controls in EETS should be re-evaluated with particular attention paid to the Processor's ability to override system generated alerts or information.
Accounting and Cost Tracking (Control Activities)			
13. PGC program revenue and disbursements systems are integrated with the financial accounting systems and are adequately designed and documented.	No	EETS did not provide sufficient control during the audit period. While some of these deficiencies were subsequently addressed. Certain EETS users have the ability to override the system.	
14. Program managers receive monthly budget vs. actual cost reports. Reviews are conducted to ensure program charges are appropriate, and variances are reviewed and resolved.	Yes		
15. The utility has established appropriate checks and quality control procedures regarding payment of incentives.	Yes		
16. Authorization levels for expenditure approval are appropriate.	No	The Supply Management group does not confirm the approval limit of the authorizing individual prior to placing market commitments, nor does the Accounts Payable confirm the approval limit prior to payment.	Develop a process to ensure that individuals approving requisitions have the appropriate level of authority. Limit the authority to delegate approvals.
17. There is adequate rebate application review and approval.	Yes		
Compliance (Program Rules)			
18. Program reporting is based upon information contained in the accounting records and is in compliance with Commission requirements.	Yes		
19. Participant eligibility for a program is determined.	Yes	There is no formal application process for some rebate programs, i.e. the Residential New Construction program.	

4. Conclusions

Corporate Control Environment

C36. SDG&E has demonstrated sufficient commitment to regulatory compliance and internal control in the design of its Energy Efficiency organization.

- Spans of control are reasonable.
 - ⇒ In the pre-integration organization structure only one position had more than 10 reports. The majority of the direct reports for this position were energy efficiency auditors. This is an acceptable span of control since the majority of direct reports are performing a single function that does not require significant management oversight.
 - ⇒ In the post-integration organization structure, only two managers have more than 10 reports. In both instances, the majority of direct reports are performing a single function that does not require significant management oversight.
- Job descriptions provide for sufficient separation of duties related to payments processing and clearly state job requirements that are consistent with energy efficiency objectives.
 - ⇒ **Exhibit IV-54** details the position responsible for major elements of rebate or incentive payment processing.

Exhibit IV-54: SDG&E Organizational Responsibility for Incentive and Rebates Processing is Sufficient

Program	Application Processing	Inspection	Payment
Residential Rebates	Processors	Inspectors	Voucher Processors / Senior Accounting Associate [Note 1]
Nonresidential Rebates (Express Efficiency)	Processors (Processing) Program Manager (Approval)	Inspectors	Program Manager
Residential New Construction	Program Manager	Third Party Inspectors [Note 2]	Program Manager
Commercial New Construction	Program Manager	Inspectors	Program Manager

Note 1: Voucher Processors, also referred to as Quality Assurance Processors, review verified applications and create voucher requests for each application. A Senior Accounting Associate does an additional review of the application to verify the voucher against the application before actually sending the voucher request to SAP for payment processing.

Note 2: Third party inspectors are hired and paid by developers.

Source: DR SDG&E DW-004, DW1-001, Question 1, and blueCONSULTING analysis.

- ⇒ Inspections for Nonresidential Rebates and Residential and Nonresidential New Construction programs are completed 100 percent of the time. The inspection function is completed by Inspectors who, with the exception of a period in 1999, are in a different department from the Program Managers. This creates sufficient separation of duties for these programs.

⇒ For Residential Rebates, rebate applications are processed by Processors in the Residential Rebates department. Payment processing is completed by assigned personnel in the Analysis and Support group, a separate organization.

- Job descriptions provide for sufficient separation of duties related to program performance evaluations.

⇒ Measurement and evaluation of Energy Efficiency programs is completed by Business Analysts who are in the Analysis and Support department. This department is separate from all Energy Efficiency programs.

- Continuity of experience appears reasonable. While there was employee turnover and Manager and Program Manager personnel changes during the audit period, these changes appear reasonable given normal business operations.

C37. Although elements of the energy efficiency system of controls are designed within the framework of the broader Sempra Energy corporate policies and controls, during the 1998-2002 audit period the energy efficiency program did not consistently comply with these controls.

- The Sempra Energy Corporate Guidelines apply to all energy efficiency staff, and energy efficiency staff is required to acknowledge their understanding and compliance with the guidelines annually.
- Performance evaluations are conducted for energy efficiency staff in a manner that is consistent with all of Sempra Energy employee evaluations.
- Although the energy efficiency program has adopted Sempra Energy's Procurement policies, initial evaluation indicates that energy efficiency program contracting and procurement not did follow established procedures throughout the audit period.

⇒ Policies related to competitive sourcing and requirements for supporting documentation were not consistently followed. One vendor was identified that did not have a contract in place during the audit period, despite consistent and significant use. Payments to this vendor were reviewed as part of our cost testing.

⇒ Policies related to separation of duties may not have been consistently followed. Through interviews with Managers, one instance was uncovered where the same individual was responsible for requisitioning, receipting and approving an invoice.

- SDG&E did not consistently comply with its guidelines regarding Business Conduct acknowledgement during the period 1998 to 2000. Employee review and acknowledgement of Corporate Guidelines did not take place in 1998 and two of the fifteen employees tested did not have the appropriate acknowledgement documentation in their files for 1999. However, since the adoption of the on-line acknowledgement in 2000, compliance has improved.

C38. Sempra has an adequate internal audit program that makes a positive contribution to the design and implementation of PGC program systems and internal controls. SDG&E responded appropriately to all internal and external energy efficiency program audits.

- During the 1998-2002 audit period, the internal audit department performed a total of 285 audits of SDG&E and SCG financial and operational controls. **Discussion of audit scope redacted for reasons of confidentiality.**
- SDG&E conducted three audits of the Energy Efficiency program between 1998 and 2002.
- SDG&E management responded appropriately to all audit recommendations. All changes recommended by internal audits were implemented.

C39. Incentive and rebate processing during the 1998-2002 audit period may have been compromised by weaknesses in the related systems of internal controls.

- There is insufficient separation of duties related to the use of EETS.
 - ⇒ **Discussion of internal audit results redacted for reasons of confidentiality.**
 - ⇒ Through interviews with Managers, one instance was uncovered where the individual was responsible for requisitioning, receipting and approving an invoice.
- EETS controls were weakened by the ability of Processors to override the system.
 - ⇒ **Discussion of internal audit results redacted for reasons of confidentiality.**
 - ⇒ During the period from 1998 through 2002, some of these deficiencies have been addressed. However, there continues to be a concern regarding the ability of some EETS users to override system controls. EETS controls continue to be insufficient due to the ability of Voucher Processors to override system selected inspections by replacing the Inspection Request Date with the word “skipped”.
- In response to the above, SDG&E said that changes have been made recently and the override capability is for a very limited number of individuals, the Processing Supervisor and his back-ups, in order to correct errors (e.g. the incorrect rebate amounts).

Program Design and Funding

C40. SDG&E made an adequate effort to contribute to the design of PGC programs and policies.

- SDG&E attended all PGC related workshops.
- SDG&E provided comments to draft PGC programs and policies circulated by Commission.

C41. SDG&E establishes program budgets based directly on the budgets approved by the Commission and had an effective process to track expenditures.

- Program expenses are tracked in SDG&E's cost accounting systems and monthly reports are provided to Program Managers which track actual versus budget expenditures.
- Program Managers meet with their Senior Managers, generally at a minimum of once per month and often more frequently, to review program expenditures to date and to explore fund shifting opportunities.

C42. SDG&E does not have any formal guidelines or processes to identify and evaluate fund-shifting opportunities, except for the guidelines that are provided by the Commission. Although SDG&E fund shifting was consistent with the Commission's directives, SDG&E's approach to fund shifting in 2002 caused unnecessary budget variances and led to SDG&E missing a fund shifting opportunity.

- SDG&E had no fund shifts in 1998.
- Although SDG&E fund shifting activity during 1999 to 2001 was consistent with Commission directives, the fund shifting process at SDG&E was informal and undocumented. Consistent with the manner in which fund shifting rules were presented by the Commission, SDG&E viewed fund shifts as creating a range of acceptable expenditures above and below Commission budgets. Rather than formally deciding upon and documenting fund shifting decisions, fund shifts were approved implicitly when Managers accepted Program Manager expenditure forecasts. If a program's forecasted expenditures exceeded the available budget, the appropriate Energy Efficiency Manager would evaluate whether other programs in that category were projected to be under budget. The Energy Efficiency Manager would either accept the higher-than-budget forecasted expenditure or would instruct the Program Manager to stay within the original budget. Approved higher-than-budget forecasted expenditures were in essence approved fund shifts. However, these fund shifts were not recorded and the program's budget was not formally changed.
- In D. 02-03-56, the Commission clarified how it intended the utilities to evaluate fund shifting opportunities. The Commission stated: "The IOU may only make the [fund] shift if and when it appears that, after substantial efforts, the IOU will be unable to use the program funding for the intended purpose." In 2002, SDG&E continued to identify fund shifting opportunities based on projected over-budget expenditures, rather than projected under-budget expenditures. This approach was inconsistent with the Commission's guidelines.
- The Multi-Family Energy Efficiency Rebates program used only 88 percent of its available budget. As previously discussed, this was due to lower than expected demand for gas measures and use of only 68 percent of the Administrative budget. Based on Program Manager interviews, the low gas measure demand was caused by insufficient incentive amounts. Given their knowledge that incentive amounts were not going to change and their belief that administrative funds were not required, it is reasonable that

SDG&E could have foreseen that there would be significant unused funds. The Single Family Energy Efficiency Rebates program would have been a good recipient of these funds. The Single Family program significantly under-performed against its Energy Efficiency goals largely because of lower than expected response to high energy savings measures. However, the program was experiencing strong response to other measures. Indeed the Single Family Rebates program ended the year 3 percent over its total budget and 11 percent over its incentives budget. With additional funds, the Single Family program likely could have closed part of the gap in its realized energy savings.

- SDG&E's fund shifting decisions do not appear to have been impacted by available shareholder incentives. An analysis of the programs for which SDG&E received shareholder incentives indicated that in the majority of instances the actual program spending was under the Commission authorized budget. This confirms that SDG&E did not shift funds to that program for the purposes of achieving shareholder incentives.

Program Oversight and Management

C43. In 2002, SDG&E did not consistently meet its energy efficiency program goals. The existing reporting infrastructure provides timely information necessary to identify problems associated with program budgets and objectives. However, management does not consistently act upon this information in a timely manner.

- SDG&E failed to meet its goals for a variety of reasons including the late energy efficiency program approval by the Commission, and a lack of Energy Efficiency Manager accountability for and commitment to the program goals. According to SDG&E the inability to modify statewide programs to optimize them for the San Diego climate and customer base was also a significant factor.
- **Exhibit IV-55** shows SDG&E success against Commission provided goals.

Exhibit IV-55: SDG&E Significantly Underperformed Against Several Program Goals in 2002

	GOALS			ACTUALS			ACTUAL AS % OF GOAL		
	Energy (kWh)	Demand (kW)	Energy (ths)	Energy (kWh)	Demand (kW)	Energy (ths)	Energy (kWh)	Demand (kW)	Energy (ths)
Programs with Energy Goals									
Appliance Recycling	9,012,603 [Note 1]	1,380	--	8,077,822 [Note 2]	1,224 [Note 2]	--	90%	89%	--
SF EE Rebates	8,466,000	6,460	336,893	4,536,242	2,915	428,788	54%	45%	127%
MF EE Rebates	2,440,484	840	279,599	1,326,444	207	163,379	54%	25%	58%
SPC	8,568,000	1,070	186,089	13,730,323	1,125	200,249	160%	105%	108%
Express Efficiency	47,452,000	9,040	607,310	46,674,406	9,131	337,496	98%	101%	56%
CA EnergyStar New Homes	1,262,000	1,350	93,856	1,980,172	2,125	135,286	157%	157%	144%
Savings by Design	10,832,000	2,090	141,784	13,588,208	2,378	365,229	125%	114%	258%
Upstream Lighting	22,500,000	3,120	--	19,713,090	2,983	--	88%	96%	--
Lighting Turn-In	1,867,677	294	--	2,308,648	363	--	124%	123%	--
EZ Turnkey	3,090,842	532	--	3,582,665	683	--	116%	128%	--
	Goal Amount			Achieved Amount			Achieved as % of Goal		
Programs with Other Goals									
Appliance Recycling	53% of units from HTR areas			50% of units from HTR areas			94%		
Appliance Recycling	5,225 units targetted for removal			5,161 units removed			99%		
SF EE Rebates	66% of rebates from HTR			59% of rebates from HTR			89%		
MF EE Rebates	93% of rebates from HTR			94% of rebates from HTR			101%		
Home EE Surveys	4,000 mail-in surveys			4,002 mail-in surveys			100%		
Home EE Surveys	2,667 online surveys			3,347 online surveys			125%		
Home EE Surveys	Spanish and one Asian language version			Completed			100%		
Home EE Surveys	50% of mailed surveys to HTR customers			100% of mailed surveys to HTR customers			200%		
CA EnergyStar New Homes	20% of funds to HTR customers			37% of to HTR customers			185%		
Express Efficiency	59% of applications from HTR			66% of applications from HTR			112%		
Express Efficiency	Coordinate marketing efforts to small and medium businesses			Completed			100%		
Nonres Energy Audit	3,950 audits			3,977 audits			101%		
Nonres Energy Audit	750 audits for HTR			845 audits for HTR			113%		
Building Operator Cert	2 course series			Completed			100%		
Building Operator Cert	50 students			51 students			102%		
Savings by Design	32% of applications from HTR			36% of applications from HTR			113%		
Education and Training	8 residential events in HTR areas			38 residential events in HTR areas			475%		
Education and Training	32 residential events in HTR areas			34 residential events in HTR areas			106%		
Upstream Lighting	15% of budget to HTR			12% of budget to HTR			80%		
Upstream Lighting	10% of budget to grocery and drug stores			19% of budget to grocery and drug stores			190%		

Note 1: Target was reported in the SDG&E 4th Quarter Status Report dated May 2003 as 10,925,629; however, this is the original figure. This target was modified in D.03-02-027.

Note 2: These figures were inaccurate in the SDG&E 4th Quarter Status Report; actual figures were confirmed in SDGE-DR-DW-010-Q7.

Source: D.02-03-056, D.03-02-027, SDG&E PY 2002 4th Quarter Status Update.

- The Commission's final decision approving the 2002 Energy Efficiency programs was not released until March 22, 2002. In the case of the Multi-Family Energy Efficiency Rebate program, the Commission significantly increased the energy savings goals from those proposed by SDG&E. SDG&E's proposed goals were based on its developed program strategy, and more specifically, based on the measures which were projected to be installed. Achieving the Commission goals within budget would have required that different, high-savings measures be installed. The Commission's late decision hampered SDG&E's ability to achieve its goals by limiting the amount of time it had to develop new program strategies.

- SDG&E Energy Efficiency Managers are not adequately held accountable for achieving Energy Efficiency program goals.
 - ⇒ The achievement of Energy Efficiency program goals is not a standard element of Energy Efficiency performance reviews.
 - ⇒ In 2002, the Energy Efficiency staff members responsible for the Single Family Rebate program, the Multi-Family Rebate program and the Express Efficiency program did not receive any negative comments in their annual performance reviews, despite significantly missing their program goals.
- According to SDG&E, the requirement for statewide programs to be implemented in a consistent manner by all utilities reduced SDG&E's ability to optimize the programs based on the unique characteristics of its region. For example, the relatively moderate climates in San Diego require higher incentive payments for certain energy efficiency measures because the payback on such measures is longer than it would be in more extreme climate zones. SDG&E believes that this inflexibility was a contributor to the Multifamily and Single Family Energy Efficiency Rebate programs missing their program goals.ⁱⁱⁱ However, SDG&E did not aggressively pursue incentive modifications in PY 2002. It is the opinion of blueCONSULTING, that a key contributor to SDG&E not pursuing incentive modifications was Senior Management's belief that the Commission goals were unattainable.
- Two examples of management's failure to respond in a timely manner can be seen in the Single Family Rebate and Multi-Family Rebate programs in 2002. Both programs significantly missed their objectives, with the Single Family program achieving 54 percent of its energy reduction objective and 45 percent of its demand reduction objective and the multifamily program achieving 54 percent of its electric energy reduction objective, 25 percent of its demand reduction objective, and 58 percent of its gas energy reduction objective. In its second and third quarter filings, SDG&E noted several challenges it was facing with respect to these programs. However, management did not appear to react to these problems in a timely or sufficient manner.
 - ⇒ In its fourth quarter 2002 filing, SDG&E indicates that in response to high energy savings measures moving slower than expected in the Single Family Program it implemented, "an aggressive direct mail campaign", yet SDG&E used only 82 percent of its available Marketing/Advertising/Outreach budget. According to SDG&E, as stated in interviews, eligible participating contractors in 2002 were relatively few. 82 percent of marketing dollars was more than sufficient to obtain saturation with the existing participating contractors. By not using all available marketing dollars SDG&E would also be in a position to shift funding from marketing to incentive dollars had the marketing efforts excelled.

ⁱⁱⁱ The 2003 Commission ruling that utilities must file advice letters requesting measure incentive modifications will further hinder the utilities' ability to optimize their programs by increasing the time it takes to make incentive changes. For example, SDG&E did not receive a Commission response to its request to increase Express Efficiency incentives, which was filed on July 30, until September 22.

⇒ In its second quarter 2002 filing for the multifamily program, SDG&E indicated “SDG&E does not expect to make the Commission’s electric goals.” In its fourth quarter filing, SDG&E stated that “in an effort to try and mitigate low customer response, SDG&E Program Managers aggressively pursued partnerships with local contractors and property managers.” SDG&E had used only 66 percent of its available Labor budget, indicating that the program remained under-staffed for the entirety of the program year, despite the perceived importance of Program Managers’ interaction with contractors and property managers. In its response to these observations, SDG&E asserts that the multifamily program is market driven and is largely dependent on relationships developed with a relatively small number of participating contractors. The program manager worked closely with all eligible participants and met continually throughout the year to promote and encourage participation. SDG&E believes that additional staffing would not have impacted the number of contractors participating.

- The instances where SDG&E missed program goals were not caused by poor fund shifting decisions. SDG&E primarily missed its goals in the Residential program. Since all three Residential programs underperformed against program goals and fund shifting rules prohibit shifting outside of program categories; fund shifting could not have influenced these results.

C44. During the audit period, SDG&E did not have adequate procedures relating to the selection and control of contractors.

- Although the Sempra Energy corporate expense and procurement policies provided sufficient control over purchases, there were several important deficiencies.
 - ⇒ The authority to make market commitments is widely distributed to energy efficiency employees per the Corporate Approval and Commitment Policy. Given this, it is important that every staff member with authority to place market commitments be familiar with the governing procurement policies. In interviews with Supply Management and energy efficiency staff, it could not be confirmed that the Procurement Best Practices document dated July 1, 1998 was disseminated to energy efficiency staff members. If it was not disseminated, the effectiveness of the policy would have been significantly compromised. The Procurement Policy dated March 18, 2002 was disseminated to all energy efficiency staff.
 - ⇒ In the Sempra Energy Procurement Best Practices document, the policy document relevant to most of the audit period, there was no clear policy requiring contracts with vendors. This deficiency negatively affected the control that SDG&E had over its key suppliers. Of the ten suppliers evaluated, four suppliers did not have an established contract in at least one year where expenditures exceeded \$75,000.
 - ⇒ **Discussion of procurement policy redacted for reasons of confidentiality.** As such, formal vendor evaluations are not being conducted after contract award. Vendor evaluations were requested for eight vendors with whom SDG&E had done

significant business for more than three years. In no instance was SDG&E able to provide documentation of post-contract award vendor evaluations.

- SDG&E did not consistently adhere to the procurement policies requiring competitive sourcing. Testing was done for eight vendors, which should have had competitively sourced contracts. Of the eight suppliers, only two suppliers had contracts that were consistently competitively sourced.
- There is no formal process by which outsourcing versus in-house decisions are made. However, a review of ten primary Energy Efficiency program suppliers did not uncover any instances where the decision to outsource the work was inappropriate.

C45. SDG&E does not always follow Sempra's competitive bidding procurement policy, although the policy itself is somewhat vague.

- Vendor A (**vendor name redacted for reasons of confidentiality**) provided services to the energy efficiency program throughout the 1998-2002 audit period. Vendor A provided services related to the setup and staffing of information booths at community events. Our sample included 65 transactions totaling approximately \$142,000.
- There was no evidence that a competitive bidding process was used to support the decision to hire Vendor A (**vendor name redacted for reasons of confidentiality**). Additionally, no contract or purchase order was ever established. The rates charged by Vendor A for its services appeared excessive for the work performed, although we did not establish benchmark rates from competing firms. Vendor A charged a labor rate of (**labor rate redacted for reasons of confidentiality**) per hour in 1998 for the delivery and setup of booths. Subsequently the rate increased to (**labor rate redacted for reasons of confidentiality**) per hour.
- The current Sempra Energy Procurement Policy, as well as those in place during the audit period, is vague when describing the circumstances under which a competitively sourced contract is required. The current policy states, (**discussion of procurement policy redacted for reasons of confidentiality**). The 1998 Procurement Best Practices document, the policy most relevant to the audit period stated, (**discussion of procurement policy redacted for reasons of confidentiality**). For the purposes of this audit, we have taken these guidelines to mean i) that contracts should be established with all vendors with annual spend greater than (**discussion of procurement policy redacted for reasons of confidentiality**) depending on the time period and ii) that these contracts should be competitively sourced. This would be consistent with good business practice, and is an appropriate level of control. When compared against these standards, the PGC program was found to be deficient as previously stated. It is conceivable that these deficiencies occurred because of ambiguity that existed in the policies.

C46. The reporting of annual energy efficiency program costs to the Commission reflects actual expenditures and commitments, as do the financial statements for these programs. SDG&E tracks actual expenditures against commitments, but this is not reported to the Commission.

- To date, no true-up process has been agreed upon between the Commission and the IOUs, including SDG&E. Commitments at the end of a program year are added to actual expenditures in that year for reporting purposes, but are not accounted for in the following program year reports. Instead, the status of commitments made in the second program year is reported with actual expenditures for that year, and prior year commitments that are fulfilled or canceled are not separately identified in the subsequent year reports.
- There is no official SDG&E policy on how and when a commitment is cancelled. During the year, reviews are made and contracts are cancelled based upon the customer requesting a cancellation or the contract expiration date. Unless there are pending legal issues with a contract, SDG&E will generally cancel contracts as the contracts expire.
- SDG&E will also adjust the outstanding contract balances at year-end based on updates provided by the program managers overseeing the contract commitments. Accruals, payments, and cancellations of commitments are captured in SDG&E's liability accounts (2120129 for Electric and 2120130 for Gas). **Exhibit IV-53** on the following page shows the disposition of SDG&E's year-end energy efficiency program commitments by year, for the five-year audit period.

Exhibit IV-56: SDG&E's Disposition of Commitments by Program and by Year

Program Name	Program Year	Calendar Year	Incentive Commitments (made at year-end) ¹	Beginning Balance	Incentives Paid/Cancelled (during the year)	Remaining Commitments (at year end)
Res Standard Performance Contract	1998	1998	\$3,617,232		\$0	\$3,617,232
		1999		\$3,617,232	\$816,799	\$2,800,433
		2000		\$2,800,433	\$434,328	\$2,366,105
		2001		\$2,366,105	\$68,516	\$2,297,589
		2002		\$2,297,589	\$0	\$2,297,589
Savings By Design	1998	1998	\$817,079		\$0	\$817,079
		1999		\$817,079	\$490,992	\$326,087
		2000		\$326,087	\$226,921	\$99,166
		2001		\$99,166	\$99,166	\$0
Savings By Design	1999	1999	\$1,597,898		\$0	\$1,597,898
		2000		\$1,597,898	\$529,651	\$1,068,247
		2001		\$1,068,247	\$766,681	\$301,566
		2002		\$301,566	\$301,566	\$0
Savings By Design	2000	2000	\$1,398,029		\$0	\$1,398,029
		2001		\$1,398,029	\$0	\$1,398,029
		2002		\$1,398,029	\$798,781	\$599,248
Savings By Design	2001	2001	\$2,512,525		\$0	\$2,512,525
		2002		\$2,512,525	\$1,061,164	\$1,451,361
Savings By Design	2002	2002	\$1,535,327		\$0	\$1,535,327
Non Res SPC - Large	1998	1998	\$7,317,580		\$0	\$7,317,580
		1999	\$0	\$7,317,580	\$1,055,755	\$6,261,825
		2000	\$0	\$6,261,825	\$1,801,278	\$4,460,547
		2001	\$0	\$4,460,547	\$555,459	\$3,905,088
		2002	\$0	\$3,905,088	\$1,654,705	\$2,250,383
Non Res SPC - Large	1999	1999	\$3,504,073		\$0	\$3,504,073
		2000	\$0	\$3,504,073	\$1,873,127	\$1,630,946
		2001	\$0	\$1,630,946	\$71,913	\$1,559,033
		2002	\$0	\$1,559,033	\$304,066	\$1,254,967
Non Res SPC - Large	2000	2000	\$5,673,660		\$0	\$5,673,660
		2001	\$0	\$5,673,660	\$1,492,905	\$4,180,755
		2002	\$0	\$4,180,755	\$602,070	\$3,578,685
Non Res SPC - Large	2001	2001	\$3,597,054		\$0	\$3,597,054
		2002	0	\$3,597,054	\$1,200,042	\$2,397,012
Non Residential SPC	2002	2002	\$2,335,853	\$2,335,853	\$0	\$2,335,853
Non Res Small Business SPC	2000	2000	\$309,129		\$0	\$309,129
		2001		\$309,129	\$149,298	\$159,831
		2002		\$159,831	\$20,783	\$139,048
Non Res Small Business SPC	2001	2001	\$499,370		\$0	\$499,370
		2002		\$499,370	\$251,332	\$248,038
Fas Trac	2000	2000	\$403,244		\$0	\$403,244
		2001		\$403,244	\$386,694	\$16,550
		2002		\$16,550	\$0	\$16,550
Third Party Initiatives	1998	1998	\$900,342		\$0	\$900,342
		1999		\$900,342	\$189,047	\$711,295
		2000		\$711,295	\$281,762	\$429,533
		2001		\$429,533	\$0	\$429,533
		2002		\$429,533	\$0	\$429,533
Residential New Construction	2000	2000	\$155,550		\$0	\$155,550
		2001		\$155,550	\$9,200	\$146,350
		2002		\$146,350	\$25,140	\$121,210
Residential New Construction	2001	2001	\$1,300,575		\$0	\$1,300,575
		2002		\$1,300,575	\$101,900	\$1,198,675
California Energy Star New Homes	2002	2002	\$1,548,500		\$0	\$1,548,500

Source: SDG&E-RLR-014-Q1.

Accounting and Cost Tracking

C47. SDG&E's overall management of energy efficiency program expenditures met the Commission's objectives during the audit period. However, at the program and cost category level there were variances from approved budgets.

- SDG&E had appropriate processes in place to ensure expenditures did not exceed budgets. As can be seen in **Exhibit IV-57**, SDG&E never exceeded the annual energy efficiency program budget, and only once exceeded a program category budget. The exhibit also shows actual program expenditures as a percent of budget at a program category level.
- At the energy efficiency program and the program category level actual expenditures were significantly below budget in 1998 and 1999. However, it does not appear that this was the result of poor budget management. Between 2000 and 2002, actual expenditures more closely matched budgets.

Exhibit IV-57: SDG&E Did Not Exceed the Annual Energy Efficiency Program Budget for 1998-2002

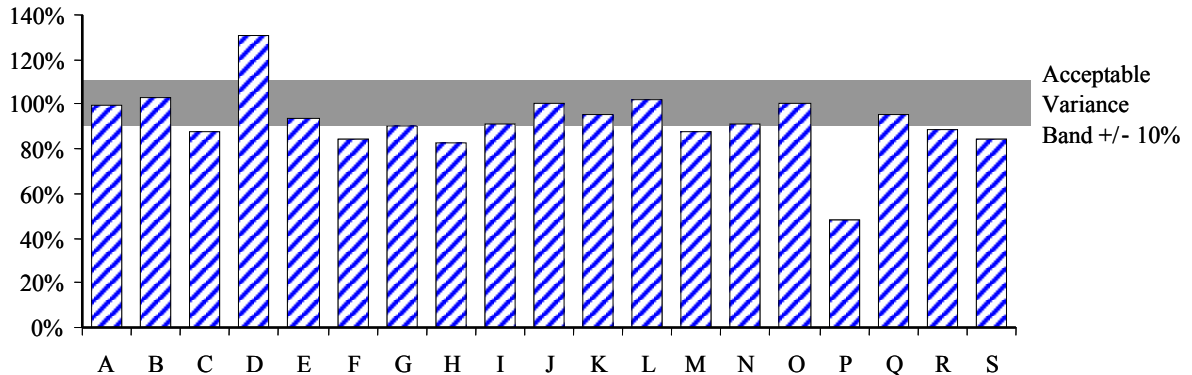
Program Area	2002	Q1/ Bridge 2002	2001	2000	1999	1998	Summer Initiative
Residential Programs	99%	137%	100%	99%	85%	92%	
Nonresidential Programs	89%	105%	98%	92%	60%	88%	
New Construction Programs		86%	98%	100%	102%	86%	
Residential New Construction	100%						
Nonresidential New Construction	95%						
Cross-Cutting Programs	95%						
Local Initiatives	91%						
Total Programs	94%	112%	99%	96%	75%	89%	93%

Note 1: In D.01-11-066, the Commission authorized utilities to use funds leftover from previous years in addition to the established budgets.

Source: D.02-03-056, D.02-056-046, D.01-11-066, D.01-01-060, SDG&E Request for Approval of 2000 Energy Efficiency Programs, SDG&E Request for Approval of 2001 Energy Efficiency Programs, SDG&E Advice Letter 1247-E/1213-G, D.99-12-053, Resolution E-3589, D.97-12-103, SDG&E Advice Letter 1104-E/1100-G; Resolution E-3555, SDG&E Annual Reports 1998 to 2002, SDGE-DR-JDH-001.

- At a program level, SDG&E demonstrated an effective process to manage budgets. Program budgets were generally within guidelines. In 2002, there were several programs with expenditures that were significantly under-budget. **Exhibit IV-58** shows 2002 actual program expenditures as a percent of budget.
 - ⇒ The 2002 Multi-Family Energy Efficiency Rebates program used only 88 percent of its available budget. Through interviews with Energy Efficiency Managers, it appears there were two main reasons why this program ran under-budget. The first cause was a lower-than-expected demand for the gas measures resulting from incentives being too low to make the measures economical. The second cause was only 68 percent of the available administrative budget was required to administer the program.

Exhibit IV-58: 2002 Energy Efficiency Actual Program Expenditures as Percent of Budget



Legend

A – Appliance Recycling	K – Savings by Design
B – SF Energy Efficiency Rebates	L – Cross -Cutting Education and Training
C – MF Energy Efficiency Rebates	M – Codes and Standards Advocacy
D – Home Energy Efficiency Surveys	N – Upstream Lighting
E – Nonresidential SPC	O – Lighting Turn -In
F – Express Efficiency	P – In-Home Audits
G – Nonresidential Energy Audit	Q – EZ Turnkey
H – Building Operator Certification	R – Small Business Assessment
I – Emerging Technologies	S – Energy Code Training
J – CA EnergyStar New Homes	

Source: D. 02-03-056 page 3, D. 02-05-046, page 6, SDG&E 4th Quarter Status Report, Data Response JDH-001-Q2.

⇒ The 2002 Express Efficiency program used only 83 percent of its available budget, while missing some of its energy savings goals. Through interviews with the Program Manager, it is believed that this under-spending was caused by the reservation process and an unusually high number of cancellations. **Exhibit IV-59** shows actual and committed expenditures from September to December 2002. As a result of a statewide “Fall Sale” in which higher incentives were temporarily offered, the Express Efficiency program experienced an increase in incentives in October, increasing actual expenditures plus commitments to 101 percent of budget. However, a high number of these reservations were cancelled in December, leaving the program staff with too little time to re-coup the losses. As a result, expenditures and energy savings were below targets.

**Exhibit IV-59: 2002 Express Efficiency Program Actual and Committed Expenditures were Substantially Less than Budget
(Dollars in Thousands)**

	Fund Shift Adjusted Budget	Actual Expenditures	Commitments	Total Expenditures + Commitments	Percent of Budget
September	\$3,054	\$620	\$811	\$1,430	47%
October	3,054	914	2,158	3,072	101%
November	3,054	1,098	1,776	2,875	94%
December	3,054	2,576	0	2,576	84%

Source: Response to Verbal Document Request-DW-002

- In 2002, SDG&E did not have adequate procedures in place to adhere to cost category level budgets, as provided in the 2002 Implementation Plans. **Exhibit IV-60** (following pages) shows actual versus budget expenditures at the cost category level for 2002 Energy Efficiency programs.
 - During the verification process, SDG&E reviewed the table and identified five instances where SDG&E exceeded the budget for the cost category. In three of the five, the dollars were moved from Marketing and Administration to Direct Implementation (i.e., Incentives). In the remaining two instances, funds were shifted into the Marketing Outreach category. The Company states that these “fund shifts” were to provide more rebates to the customers and to encourage customers to participate in the audit program. Moreover, there were no Commission guidelines regarding “fund shifts” between cost categories within a program.
- ⇒ In interviews, Energy Efficiency Managers indicated that their primary budget concern was at the program level, not at the cost category level. Several managers expressed the understandable attitude that it was a positive event if available administrative funds, for example, could be made available for Incentive payments.

**Exhibit IV-60: 2002 Energy Efficiency Actual Program Expenditures
as Percent of Budget Shown by Cost Category**

	Authorized Budget	Actual Expenditures	Actual as % of Budget
Appliance Recycling [Note 1]			
Single Family Energy Efficiency Rebates			
Administrative	\$627,617	\$509,238	81.1%
Marketing/Advertising/Outreach	\$313,000	\$255,391	81.6%
Direct Implementation Costs	\$2,336,308	\$2,604,629	111.5%
Other Costs [Note 2]	(\$79,925)	(\$79,925)	100.0%
	\$3,197,000	\$3,289,333	102.9%
Multi-Family Energy Efficiency Rebates			
Administrative	\$319,483	\$215,821	67.6%
Marketing/Advertising/Outreach	\$3,000	\$784	26.1%
Direct Implementation Costs	\$1,215,017	\$1,134,540	93.4%
Other Costs [Note 2]	(\$37,500)	(\$37,500)	100.0%
	\$1,500,000	\$1,313,645	87.6%
Home Energy Efficiency Surveys			
Administrative	\$78,360	\$62,977	80.4%
Marketing/Advertising/Outreach	\$28,000	\$203,309	726.1%
Direct Implementation Costs	\$98,640	\$0	0.0%
Other Costs [Note 2]	(\$5,000)	(\$5,000)	100.0%
	\$200,000	\$261,286	130.6%
California ENERGYSTAR New Homes			
Administrative	\$740,549	\$432,631	58.4%
Marketing/Advertising/Outreach	\$280,350	\$42,810	15.3%
Direct Implementation Costs	\$1,089,052	\$1,634,150	150.1%
Other Costs [Note 2]	(\$51,950)	(\$51,949)	100.0%
	\$2,058,001	\$2,057,642	100.0%
Standard Performance Contract			
Administrative	\$699,815	\$422,876	60.4%
Marketing/Advertising/Outreach	\$33,000	\$3,794	11.5%
Direct Implementation Costs	\$2,034,685	\$2,177,587	107.0%
Other Costs [Note 2]	(\$67,500)	(\$67,500)	100.0%
	\$2,700,000	\$2,536,757	94.0%
Express Efficiency			
Administrative	\$582,347	\$464,100	79.7%
Marketing/Advertising/Outreach	\$160,000	\$154,688	96.7%
Direct Implementation Costs	\$2,439,253	\$2,034,535	83.4%
Other Costs [Note 2]	(\$77,600)	(\$77,600)	100.0%
	\$3,104,000	\$2,575,723	83.0%
Nonresidential Energy Audit			
Administrative	\$379,594	\$473,576	124.8%
Marketing/Advertising/Outreach	\$75,000	\$177,867	237.2%
Direct Implementation Costs	\$262,906	\$0	0.0%
Other Costs [Note 2]	(\$17,500)	(\$17,500)	100.0%
	\$700,000	\$633,943	90.6%

	Authorized Budget	Actual Expenditures	Actual as % of Budget
Building Operator Certification			
Administrative	\$78,825	\$78,780	99.9%
Marketing/Advertising/Outreach	\$0	\$89,872	N/A
Direct Implementation Costs	\$74,925	\$0	0.0%
Other Costs [Note 2]	(\$3,750)	(\$3,750)	100.0%
	\$150,000	\$164,902	109.9%
Emerging Technologies			
Administrative	\$32,000	\$19,319	60.4%
Marketing/Advertising/Outreach	\$0	\$55,645	N/A
Direct Implementation Costs	\$50,000	\$165	0.3%
Other Costs [Note 2]	(\$2,000)	(\$2,000)	100.0%
	\$80,000	\$73,129	91.4%
Savings by Design			
Administrative	\$784,978	\$729,543	92.9%
Marketing/Advertising/Outreach	\$454,462	\$229,883	50.6%
Direct Implementation Costs	\$1,982,135	\$2,117,951	106.9%
Other Costs [Note 2]	(\$78,575)	(\$78,574)	100.0%
	\$3,143,000	\$2,998,803	95.4%
Education and Training			
Administrative	\$441,753	\$762,820	172.7%
Marketing/Advertising/Outreach	\$685,747	\$385,657	56.2%
Other Costs [Note 2]	(\$27,500)	(\$27,500)	100.0%
	\$1,100,000	\$1,120,977	101.9%
Codes and Standards Advocacy			
Administrative	\$50,000	\$48,812	97.6%
Marketing/Advertising/Outreach	\$2,500	\$30,357	1214.3%
Direct Implementation Costs	\$50,000	\$11,152	22.3%
Other Costs [Note 2]	(\$2,500)	(\$2,500)	100.0%
	\$100,000	\$87,821	87.8%
Upstream Lighting			
Administrative	\$308,235	\$197,631	64.1%
Marketing/Advertising/Outreach	\$106,340	\$29,190	27.4%
Direct Implementation Costs	\$1,167,000	\$1,213,750	104.0%
Other Costs [Note 2]	(\$38,575)	(\$38,575)	100.0%
	\$1,543,000	\$1,401,996	90.9%

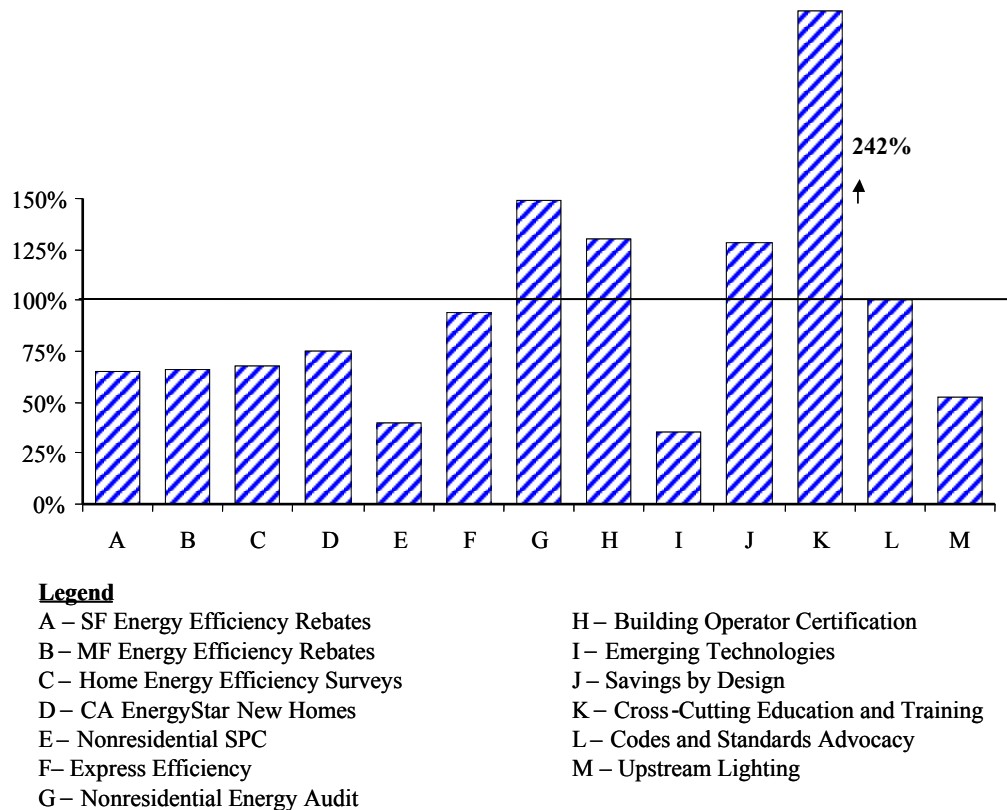
Note 1: The figures provided in the PY2002 Implementation Plan Program Budget and PY2002 Quarterly Expenditures in the SDG&E PY2002 4th Quarter Status report are inaccurate. Therefore, this analysis could not be completed by for this program.

Note 2: SDG&E uses Other Costs to back out certain Administrative expenses. All entries in this category have a negative value.

Source: SDG&E 4th Quarter Status Report, SDGE-DR-JDH-001-Q2, Clarification from SDGE-IR-DW-011.

⇒ Actual administrative costs were often significantly below budget. More specifically, SDG&E was commonly under-budget in the labor component of the administrative costs. **Exhibit IV-61** shows actual labor costs as a percentage of budget. Based on Manager interviews, it is believed that this was partially the result of uncertainty surrounding energy efficiency program budgets, as Energy Efficiency Managers were hesitant to bring on new staff without the knowledge that future budgets would be sufficient to sustain the increased employee costs. In the case of the Single Family Rebate program and the Multifamily Rebate program, it is believed that being understaffed was one of the contributors to these programs significantly missing their energy savings goals.

Exhibit IV-61: Actual Administrative Costs were Significantly Below Budget for 2002 Energy Efficiency Statewide Programs



Source: SDG&E 4th Quarter Status, SDGE-DR-JDH-001-Q2, Clarification from SDGE-IR-DW-011.

C48. SDG&E did not adequately execute its established policy related to authorized approval limits creating a risk that expenditures were inappropriately approved.

- **Exhibit IV-62** outlines the maximum approval limits for costs incurred through the ordinary course of business.

Exhibit IV-62: Confidential Exhibit - Redacted

- The Supply Management group does not confirm the approval limit of the authorizing individual prior to the placing of a market commitment. The Supply Management group ensures that the requisition had been approved by a Sempra employee; however, they leave it up to whoever is submitting the Request for Material or Services (RMS) to have gathered the correct approvals, using an “honor system.”
- There are insufficient procedures governing approval authority delegation. For example a Manager could delegate approval authority to a Supervisor. This significantly decreases the effectiveness of the authorization controls. However, one cannot delegate above his or her own approval limits and one cannot re-delegate what they have been delegated.

C49. SDG&E processes and procedures regarding program rebates and incentives were adequate but could be improved.

- During the audit period, SDG&E had written procedures detailing the requirements for rebate and incentive payments, and outlining the required documentation.
- Inspections are selected by EETS based on pre-defined inspection criteria which are consistent with Commission guidelines. EETS randomly selects the applications to be inspected; however, EETS allows Voucher Processors to override system-selected inspections. Furthermore, during the audit period, instances in which inspection dates were overridden were not tracked in EETS. This weakens the integrity of the inspection sampling methodology.

C50. During the audit period, the systems and procedures used by SDG&E for program accounting and the tracking of expenditures and commitments were adequate.

- SDG&E’s accounts payable and payment processing systems provided adequate program accounting and cost tracking. Transactions were tracked to energy efficiency programs with Cost Elements showing the nature of a particular entry.
 - ⇒ Prior to March 1999, SDG&E used a system called Cost General. Energy efficiency programs were identified using FERC account codes. Transaction codes were used to identify cost types such as Services Bought, Services (purchased services except Legal), Labor Bought, Outside Contractors.
 - ⇒ In March 1999, SDG&E implemented a system called SAP. In SAP, transactions are coded using Internal Order numbers pertaining to specific energy efficiency programs in specific years, and by detailed cost element showing the nature of a particular entry.
- Energy Efficiency program budgets and expenses are also tracked in EETS. EETS interfaces with the accounting and accounts payable systems. EETS was designed to meet the specific reporting needs of the Commission and reflects reserved incentive rebates (commitments), installed rebate activity waiting for payment, and paid rebates.

As commitments are modified, expended, or expire, program personnel update the EETS system. Only incentives are tracked in EETS, not budgets or other expenses.

- Energy Efficiency Senior Managers and Program Managers are provided monthly SAP reports, which track program actuals versus budgets.

Compliance

C51. For the selected non-SPC programs, limited testing disclosed no compliance exceptions.

- For Residential Surveys, access to the SDG&E website for the on-line energy audit requires a valid account number ensuring that audits are performed only for SDG&E customers.
- For Express Efficiency, our testing of rebate transactions confirmed customer application, eligibility, and proper rebate calculations for eligible program measures not in excess of 100 percent of cost. Further, based upon the small number of potential transactions, SDG&E controls to prevent “double dipping” are adequate.
- For Savings by Design, a review of transactions in the Rebates and Incentives database shows that only one transaction during the audit period exceeded the \$75,000 limit for the Systems Approach, and that this \$100,000 transaction was under the \$250,000 limit for incentive payments under the Whole Building Approach. We did not obtain information to confirm that this payment related to a Whole Building Approach Incentive.

C52. SDG&E complied with the SPC program rules; however blueCONSULTING did identify one project in which measures appear to have been installed prior to approval of the project application

- **Exhibit IV-63** provides a summary of blueCONSULTING’s assessment of SDG&E’s compliance with the SPC rules.

Exhibit IV-63: SDG&E Complied with Most of the SPC Program Rules

	1998	1999	2000	2001	2002
Project Sponsor Caps	✓	✓	✓	✓	✓
Affiliate Caps	✓	✓	✓	✓	✓
Customer Site Caps	✓	✓	✓	✓	✓
Corporate Parent Caps	✓	✓	✓	✓	✓
Lighting Caps	NA	NA	NA	NA	✓
Incentive Caps	NA	NA	NA	✓	✓

✓ = Compliance No= Non-Compliance NA = Not Applicable

Source: blueCONSULTING analysis of SPC Data provided in Document Response SDGE-MCL-001 Q2.

- No sponsor exceeded the applicable project sponsor cap or the statewide corporate parent cap.
- No utility affiliate exceeded the cap during the audit period. In 1998, there was no specific cap for utility affiliates. The most total contract dollars for utility affiliates were reserved for Affiliate A (**affiliate name redacted for reasons of confidentiality**). Affiliate A contract applications totaled \$1.6 million.
- SDG&E did not exceed the customer site cap.
- SDG&E complied with the 2002 rule that at least 20 percent of the energy savings come from non-lighting replacement measures.
- SDG&E's 2001 SPC project payment did not exceed 70 percent of the total project cost. SDG&E's 2002 SPC project payment did not exceed 50 percent of the total project cost.
- blueCONSULTING's review of SDG&E SPC project documents confirmed that the files contained the required project documentation.
 - ⇒ The files contained signed customer affidavits.
 - ⇒ The files contained a calculation of the incentive rate and the amount of projected or verified savings against which it was to be paid.
 - ⇒ All project files reviewed included copies of contracts or agreements that spelled out terms and conditions including the maximum allowable incentive amount.
- blueCONSULTING's review of SDG&E SPC project documents identified one instance in which measures appear to have been installed prior to the project application. Payments for this project total \$8,720.
- blueCONSULTING identified a number of instances in which the project post installation inspection date preceded the DPA contract approval date for 2000 and 2001 projects; however, as SDG&E points out this does not conflict with the program rules:
 - ⇒ Provisions in SPC procedure manual allowed... "As a general rule, actual project implementation should not begin until after the project application has been approved. However, the Utility Administrator will often allow construction to begin immediately after the pre-installation inspection. This utility "go-ahead" does not mean the application has been approved and will receive funding, but simply that proceeding with construction will not impair the application's chances for approval."
 - ⇒ On 2000 and 2001 projects SDG&E pre-inspected all projects upon application to verify no work had begun. Customers were not always able to sign contracts before work began.
 - ⇒ In no case has SDG&E paid an incentive without a fully executed contract.

5. Recommendations for Company:

- R12. SDG&E should modify how it approaches fund shifting opportunities to be more consistent with Commission guidelines. Specifically, fund shifting should no longer be considered a method of accommodating budget overages, but rather should be viewed as a method of optimally redeploying funds that cannot be used for their original purpose. (Refers to Conclusion No. C42)**
- R13. SDG&E should incorporate the attainment of energy efficiency program goals into the performance reviews of Energy Efficiency Managers and Program Managers. It is recommended that SDG&E add the Competency “Energy Efficiency Program Goals Attained” on all performance reviews. (Refers to Conclusion No. C43)**
- R14. PGC Program Management should modify the procurement policy related to contract requirements and procurement controls should be strengthened. (Refers to Conclusion No. C45)**
- The requirements should be made more specific and easier to understand.
 - The policy should promote careful consideration of in-house versus outsource decisions. In particular, justification when consultants are being used to supplement SDG&E staff should be required. This justification should include a cost-benefit analysis and/or should document the consultant’s unique expertise and why it is required by the program.
 - Contracts should be required for all vendors with projected annual spend greater than \$75,000. In determining whether a contract is required, total annual spend should be considered regardless of the amount of individual transactions. While it is reasonable that it may not always be possible to predict whether a vendor’s spend will exceed \$75,000, vendor’s historical annual spend should be used as a benchmark to project future spend.
 - Contracts with projected annual spend greater than \$75,000 should be competitively sourced and compliance with this requirement should be monitored.
 - Procurement Policies should be disseminated to all Energy Efficiency staff. Given the practice of delegating purchasing authority, all Energy Efficiency staff regardless of purchasing authority should receive this information. SDG&E should consider disseminating the Procurement Policies in the same manner as the Corporate Code of Conduct, and have employees acknowledge review of the policies on an annual basis.

- R15.** SDG&E should develop a process to ensure that individuals approving requisitions have the appropriate level of authority. One potentially cost-effective approach would be to incorporate approval limit confirmation into SAP. SDG&E should limit the authority to delegate approvals, particularly the ability to delegate approval authority to lower ranking individuals. Approval delegations should be temporary in nature based on specific events, i.e. vacations or short-term leave of absence or temporary assignment to special projects. (Refers to Conclusion No. C48)
- R16.** System controls in EETS should be re-evaluated with particular attention paid to the Processors' ability to override system generated alerts or information. Where the ability to override fields is needed, SDG&E should require that an explanation be entered into a Comments field. Furthermore, the override should be tracked in a system log noting the user's identity, and the date and time of the override. The information in the override log should be kept permanently, as opposed to the current practice of only capturing information pertaining to the most recent change. (Refers to Conclusion No. C49)

6. Policy Issues for the Commission

- R17.** The Commission should develop new policies to better manage programs with commitments and reservations. Currently, certain of the utilities (such as SDG&E) offer incentives only until Actual plus Committed Expenditures equal 100 percent of the available budget. Since some amount of cancellations is expected, this ensures that these programs under-spend available incentives. Utilities can take it upon themselves to establish a policy of accepting commitments to some level over 100 percent; however, this causes the utility to bear the risk if the program goes over-budget. (Refers to Conclusion No. C46)
- R18.** The Commission should clarify its intent regarding cost category level budgets, specifically regarding i) whether these are guidelines or actual budgets which should be adhered to and ii) circumstances under which deviations from cost category level budgets are acceptable. (At the cost category level SDG&E experienced variances from approved budgets.) (Refers to Conclusion No. C47)

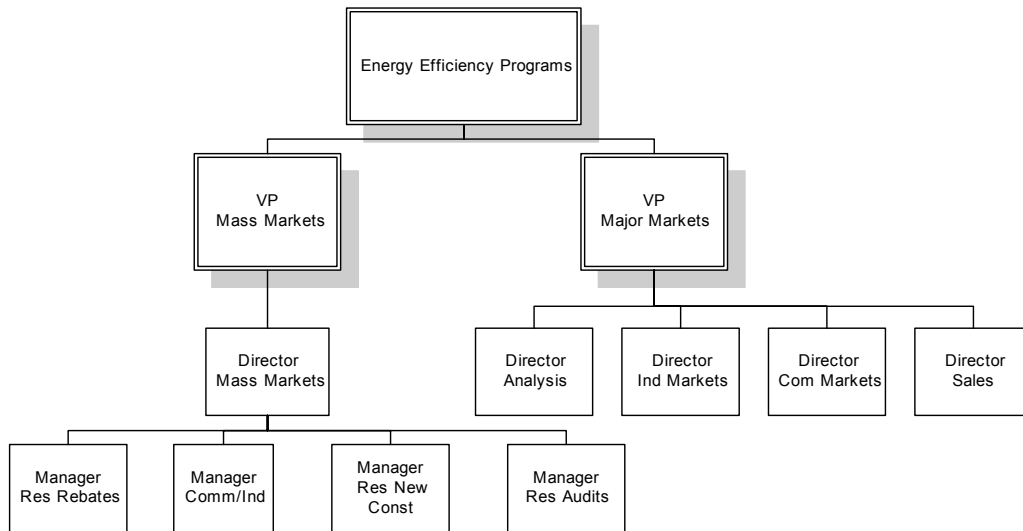
F. SCG

1. Background

A number of organizational changes affected SCG's employees and energy efficiency programs during the audit period.

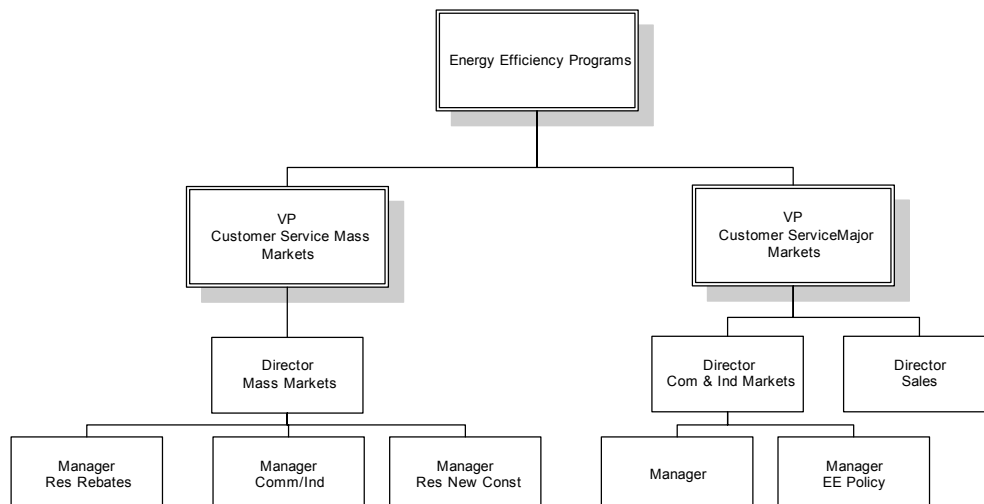
- In the beginning of 1998, SCG was owned by the parent organization, Pacific Enterprises. **Exhibit IV-64** provides the energy efficiency organization structure in place at that time.

Exhibit IV-64: First Quarter 1998 Energy Efficiency Programs Organization Structure



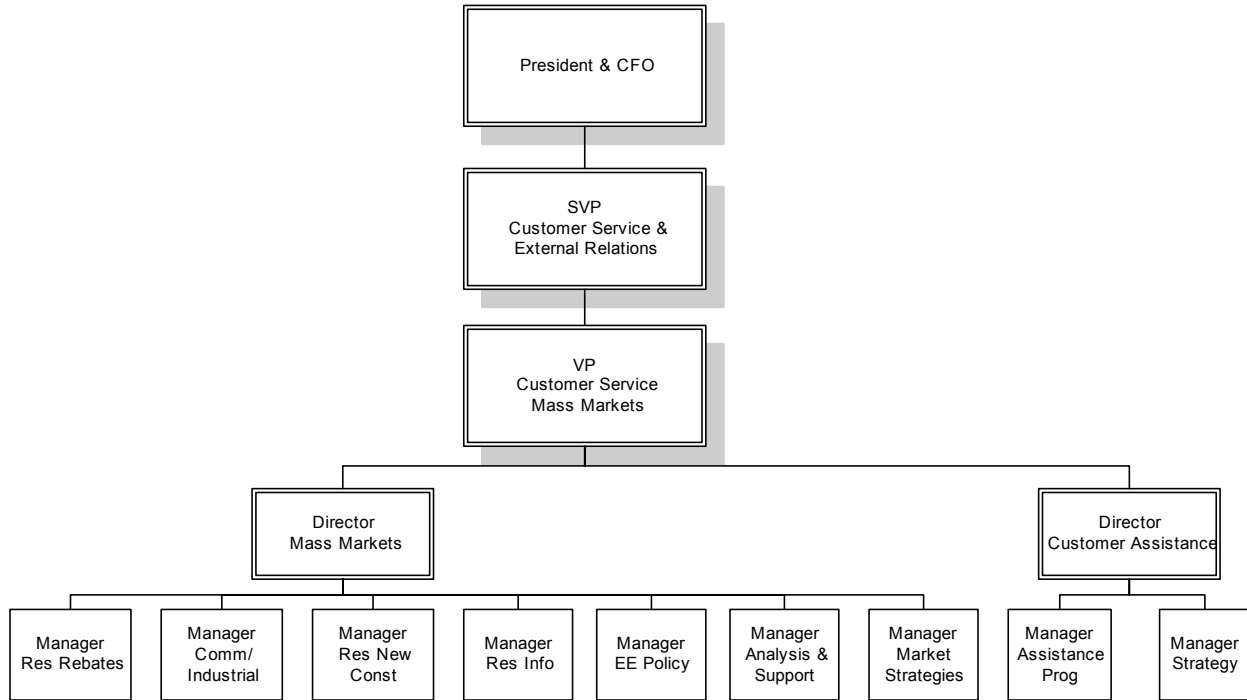
- On June 26, 1998, SCG's and SDG&E's parent companies, Pacific Enterprises and Enova, respectively, merged, forming Sempra. **Exhibit IV-65** provides the organization structure in place from the second quarter 1998 until the first quarter 2002.

Exhibit IV-65: Interim Organization Structure 2nd Quarter 1998 to 1st Quarter 2002



- In April 2002, SCG and SDG&E integrated utility activities under the Sempra holding company structure. Between the merger of the parent companies and organizational integration, some systems commonality evolved. **Exhibit IV-66** provides the organization structure in place following the integration. In 2002, SCG's energy efficiency organization consisted of 83 employees.

Exhibit IV-66: Current Organization Structure



2. Summary of Adjustments

SCG should reimburse the programs account for \$49,095, the amount by which Vendor B **(vendor name redacted for reasons of confidentiality)** was paid in excess of contract and in excess of SCG's obligation to pay during 2001.

3. Summary of Conclusions

The overall conclusions related to the Assessment of Accounting Oversight and Controls at SCG is provided in **Exhibit IV-67** below:

Exhibit IV-67: Summary Assessment of Accounting Oversight and Controls at SCG

Control Area	Adequate? (Yes or No)	Comments	Recommendation
Corporate Control Environment			
1. Management organization provides adequate direction and oversight. There is effective communication to address problems and avoid mistakes.	No	SCG administers energy efficiency Programs in an environment with limited controls.	SCG should take steps to assure that all PGC funds are expended responsibly with coincident effort to assure that value is received for funds expended.
2. Executive management is committed to internal control and regulatory compliance, and related compliance programs are adequate.	No	A sense of responsibility, as well as accountability is lacking.	SCG should strengthen its "tone at the top" with regard to compliance with Commission directives and guidelines within increased formal communication and financial reporting.
3. Organization design and staff contributes to appropriate control environment. <ul style="list-style-type: none"> ▪ Separation of duties is adequate. ▪ Staff is knowledgeable and adequately trained. ▪ The utility ensures staff continuity. 	Partial	Staff are knowledgeable and trained; however, a culture of compliance with the rules and excellence in performance does not exist.	Staff improvement must begin at the top. See points 1 and 2 above.
4. The internal audit function of the PGC program is adequate. <ul style="list-style-type: none"> ▪ Audits are conducted by qualified personnel. ▪ Audit plans incorporate periodic reviews of major systems, tests of regulatory compliance, and program specific audits. They provide for appropriate follow-up. ▪ Independent audits are performed in accordance with regulatory requirements. ▪ Management initiates corrective action on findings. 	No	Discussion of Internal Audits redacted for reasons of confidentiality.	Increase the frequency of internal or external audits of energy efficiency programs to ensure that the programs are properly managed and that appropriate controls are in place. Sempra Audit Services should do a one-year post audit follow-up to verify that recommended changes were incorporated into operating procedures.
Program Design and Funding			
5. The utility's PGC personnel participate in statewide workshops and contribute to program design and reporting requirements.	Not studied	SCG's contribution to program design is unknown and was not studied during the audit.	
6. The utility has developed an appropriate process for timely identification of changes in regulatory requirements and incorporating these requirements into its energy efficiency programs. Commission requirements are adequately communicated to project managers, who are held accountable for compliance with Commission requirements.	Yes	Communication of changes and the assignment of responsibility are routine. Procedures and systems should be strengthened.	

Control Area	Adequate? (Yes or No)	Comments	Recommendation
7. Procedures are in place to ensure program selection, budgeting and funding are performed within Commission guidelines.	Partial	SCG relies on Commission for program and budget selection as well as funding. Currently, a program manager can transfer expenses from one program to another based upon their judgment alone of what is appropriate. (Discussed in Chapter V). The audit did not find SCG to be in noncompliance with Commission guidelines.	As discussed in Chapter V, SCG should adopt stronger controls surrounding the reclassification of costs and expenses. Such reclassifications of costs or expenses should be justified by detailed estimates or calculations. A change in policy would preclude expenses from being adjusted to meet authorized funding levels, a practice which is tantamount to shifting funds outside the guidelines set out by the Commission.
Program Oversight and Management			
8. Management performs effective oversight of PGC programs. Management reviews actual performance versus budgets and program goals	Partial	Prior to 2002, performance against goals was formally evaluated only annually. In 2002, SCG implemented monthly variance reporting wherein year-to-date performance is compared against goals.	Require routine, formal performance reporting. Identify primary reasons for not meeting energy savings and reduction of peak demand goals for all projects and ensure that future goals are met.
9. The utility has established appropriate procedures for determining committed funds, tracking expenditures against commitments and releasing commitments.	Partial	SCG did not track commitments prior to 2002. While SCG now tracks commitments, it lacks a procedure to track expired or withdrawn commitments, thus released funds are unknown until yearend when reports are filed.	SCG should develop a system to track commitments, scheduled payments, expiration dates, and released funds in real-time.
10. PGC procurement policies are appropriate and consistent with corporate procurement policies. <ul style="list-style-type: none"> There is a formal decision-making process for outsourcing vs. in-house work. There is a competitive contractor selection process. Contractor/vendor relationships are evaluated periodically. There is compliance with purchase order approval limits. 	No	SCG has no formalized policies and procedures that define and control the decision-making process regarding the use of in-house staff versus vendors or subcontractors.	Strengthen the process used to select contractors, including utilizing competitive bidding.
11. Contractor oversight and monitoring is adequate. <ul style="list-style-type: none"> The Energy Efficiency group has established procedures to monitor and control contractor activities. Work performed by contractors is monitored and verified. Contractor/vendor invoices are reviewed to ensure accuracy. 	No	Procedures are weak as to documentation and oversight. Some approvals are made by staff without the proper approval authority.	Improve the process of verifying contractor's performance and on-site inspections. SCG should undertake significant systems improvement in the entire program management area with specific emphasis on assuring the vendors are paid within the terms of contracts, that contracts reflect fair value for services rendered, that specific vendors do not receive a disproportionate share of energy efficiency programs business unless good performance and pricing so warrant, and that vendors are not paid twice for the same services.

Control Area	Adequate? (Yes or No)	Comments	Recommendation
12. On-site inspections are performed as appropriate.	No	Documentation of many inspections does not exist and is not even required by SCG. Third party signatures were not obtained by the inspectors during 2002-2003. Some customers were paid even though inspections did not occur.	SCG should require third party signatures on all inspection reports except those showing failed or partially failed implementations of the inspected measures. For all programs where account executives inspect or confirm that measures are properly installed prior to payment, require that they fill out a simple form to document inspection.
Accounting and Cost Tracking (Control Activities)			
13. PGC program revenue and disbursements systems are integrated with the financial accounting systems and are adequately designed and documented.	No	PGC program disbursements are based on offline systems and non-ledger memorandum accounts. SAP is used, but only for cost accumulation and limited variance reporting of program expenditures against authorized budgets.	SCG should redesign and upgrade the procedures and systems used in the programs area to include standard procedures, systems with controls and standard reports, and the use of new systems capabilities to manage programs effectively.
14. Program managers receive monthly budget vs. actual cost reports. Reviews are conducted to ensure program charges are appropriate, and variances are reviewed and resolved.	Partial	SCG does not perform budget versus actual comparisons until year end, when corrections can no longer be made. However, in 2002, SCG implemented monthly variance reporting wherein year-to-date performance is compared against budgets.	SCG should implement stronger budgetary controls over all energy efficiency programs by formalizing expense tracking and comparison of expenses/expenditures to budget by program on a monthly basis. Increase the accuracy of tracking expenses and in particular the reclassification of expenses.
15. The utility has established appropriate checks and quality control procedures regarding payment of incentives.	Small – Yes Large – No	SCG charges program managers with much responsibility for larger rebates. There should be more check and balance with respect to larger rebate payments.	SCG should strengthen rebate-processing procedures by including more detailed instructions on acceptable forms of evidence designed to confirm that applicants actually paid for rebate measures.
16. Authorization levels for expenditure approval are appropriate.	Levels – Yes Compliance -No	Transaction testing found a significant number of vendor invoices with no approval signature, thus level of authority was not evident. The lack of documentation, or lack of approval, questions whether SCG subjects expenditures to appropriate review before making payments.	Approval of expenditures should be documented with the name of the approver and date of the approval recorded.
17. There is adequate rebate application review and approval.	No	Rebate inspection processes are inadequate. A number of non-residential rebate applications were approved by staff who did not have the required signature authority.	SCG should ensure that rebate applications are approved by staff with the required approval authority. That review and approval should be clearly documented to reflect the approver and the date of the approval.

Control Area	Adequate? (Yes or No)	Comments	Recommendation
Compliance (Program Rules)			
18. Program reporting is based upon information contained in the accounting records and is in compliance with Commission requirements.	Partial	Rather than reporting based on its internal accounting records, SCG views reports to the commission as one of its own official documents, in particular its only record of budget to actual and its record of available funds going forward. SCG believes their offline single-entry spreadsheets and databases were "accounting records". Since almost no spreadsheets from 1998-2000 still exist, their quality remains unknown. In 2002, quarterly report documentation was retained.	SCG's highest programs priority should be a comprehensive redesign and upgrade to the procedures and systems used in the programs area to include standard procedures, systems with controls and standard reports, and the use of new systems capabilities to manage programs effectively.
19. Participant eligibility for a program is determined.	Yes		

4. Conclusions

Corporate Control Environment

C53. SCG administers its energy efficiency programs in a lax environment where controls are limited, the enforcement of controls is uncertain, and decision-makers do not utilize the supporting analyses that are standard business practice in most companies.

- A number of SCG employees were laid off during the integration process. Consequently, much corporate memory was lost with the departure of those employees involved in cost accumulation and tracking during the 1998-2000 period.
 - During mid-1999, SCG participated in a process of systems integration. From an accounting perspective, the most profound event was the transfer of data into SAP. That transfer was done in summary form, removing transaction-level detail that would facilitate audit sample selection and testing.
- ⇒ From 1998-2000, programs were administered by program managers and staff using spreadsheet and database programs such as Market Analysis System (MAS) which contains information on commercial and industrial customers and energy efficiency program activity. The spreadsheets and databases were maintained informally and were not prepared to an organization-wide standard. They were not indexed or archived. A double entry accounting system (BAS) was also used.
- ⇒ In SAP, transactions are coded using Internal Order numbers pertaining to specific energy efficiency programs in specific years, and by detailed cost element showing the nature of a particular entry.

- SCG's documentation supporting energy efficiency expenditures is sufficiently poor that SCG personnel annotated business records prior to providing them to blueCONSULTING, rather than allowing us to review the records in the form kept by SCG. SCG views the provision of annotated information as simply an attempt to be helpful to the auditors.
- SCG lacked a comprehensive policy governing the preservation and archiving of the electronic and hardcopy files that were used to prepare Commission reports during the audit period. Prior to 2002, SCG did not retain documents used to prepare the quarterly report because each quarterly report superseded the prior one until the annual report was filed. SCG retained sufficient electronic files to support all its Annual Reports.
- SCG utilizes a system of apportioning costs that relies heavily on human estimation. While many costs are charged directly to programs, many others are apportioned based on the estimation of the relevant persons involved, but without supporting written analysis.
- Due to little systems support for vendor oversight, anomalies go undetected. For instance, no contract is required for purchases less than \$2,500. We note that one vendor received 21 payments of just under the limit during a twelve month period. Many of the payments were for \$2,480 or \$2,490. Since 2002, business controls have been reviewed and enhanced to ensure that there are proper controls for supply management and accounts payable.
- Rebate payments are routinely delivered in person by an account executive. See **Exhibit IV-74** for a list of the programs for which this occurs.
- As discussed in Conclusion No. C54 below, internal audit of SCG's energy efficiency programs was inadequate during the audit period.

C54. Only one audit of SCG's energy efficiency program was performed during the audit period, and the results of that audit were not been implemented in a timely manner.

- **Discussion of Internal Audit scope, approach, and findings redacted for confidentiality reasons.**

Program Design and Funding

C55. The program selection and funds allocation process is consistent with Commission direction, although SCG relies on the Commission for program and budget selection as well as funding.

C56. SCG's fund shifting activities are in accordance with Commission limitations as to amounts shifted per year, however SCG's decision making process for determining fund shifting opportunities is deficient.

- Expenditures relative to budget are poorly tracked during the year, which compromises advance planning for fund shifting decisions. An aggravating factor is that the Commission sometimes approves budgets during a program year – sometimes with too little time for SCG to effectively deploy the funds in accordance with Commission decisions. SCG's process of holding internal discussions among program management personnel to review expenditures and make fund-shifting decisions, rather than meetings based on analysis of the underlying data, is insufficient. SCG does not agree that there is no analysis done of the underlying data; however, no written analysis could be provided to blueCONSULTING. According to SCG, the program managers are responsible for conducting such analyses and that analytical procedures take place in meetings.
- Controls related to the management of funds expended relative to energy savings could be improved. SCG has noted that funds expended are driven more by applicant demand than by energy savings per dollar expended. SCG indicates that their program managers balance the demands of the marketplace; program savings goals while maintaining statewide measure availability and weigh this information along with cost effectiveness data and available market studies to determine the most advantageous funding shift within its portfolio and within the restrictions set by the Commission.
- According to SCG energy efficiency program managers, fund shifts were implemented with careful scrutiny, oversight and direction from SCG's Manager of Energy Efficiency Program Policy and Analysis who monitors the use of funds across programs as well as the expected energy savings from each program. As documented in SCG's Updated Fourth Quarter Status Report (May 2003) each of the 2002 fund shifts were carried out in accordance with Commission rules in one of two ways: 1) under D. 02-03-056, Ordering Paragraph (OP) 23, which authorizes fund shifting within a program category up to 10% of budgeted funds; or 2) under SCG's formal request in the form of a motion for authorization to transfer funds, and the Commission's explicit approval.
 - ⇒ D. 02-03-056 states that "IOUs may shift no more than 10% of one program's funds into another program in the same category. The IOU may only make the shift if and when it appears that, after substantial efforts, the IOU will be unable to use the program funding for the intended purpose".
 - ⇒ Program managers indicated they made substantial efforts to use the funds prior to shifting, but in some instances found they were unable to do so within the program year. In these cases, with the scrutiny of senior managers, the program shifted funds to other programs.

- In at least one instance – that of the 2002 Savings by Design program, more, rather than less, fund shifting may have been appropriate. A combination of fund shifts and under-expenditures in the program resulted in the program seriously under-performing its goals and priorities as established at the beginning of the program year. SCG notes that it applied to shift funds on October 20, 2002, but did not receive approval until January 13, 2003, which was too late to move the additional unspent funds.
- ⇒ Starting with a budget of \$1.973 million, the program subsequently shifted \$700,000 to other energy efficiency programs and still under-spent its budget by \$341,161, or about 27 percent by the end of the year. As a result, the program achieved only a fraction of its energy savings goals. If a larger shift of funds had been implemented, other energy efficiency programs could potentially have achieved greater savings.
- ⇒ SCG comments to the Commission were that the budget for SBD was too high for such a new program. The Commission nonetheless ordered the budget and goals, and SCG attempted to achieve them. According to SCG, since PY 2002 programs were not approved until the second quarter of 2002, its ability to implement this program was compromised as SBD was a new a new program for SCG and the program required a long lead- time to show results.
- ⇒ The major discrepancy between budgets and expenditures, coupled with the shortfall in resulting energy savings, represents an example of: 1) initial over-commitment of funds compared to what could realistically be achieved; 2) limited funds management in not shifting more of the funds; and 3) lost opportunity to achieve greater energy savings for the year.

Program Oversight and Management

C57. SCG does not prepare any periodic written energy efficiency budget to actual analyses, nor does it track progress against specific goals other than the annual goals set by the Commission.

- Program Managers use the quarterly reports to the Commission to track the performance of their programs, rather than tracking progress week-to-week or month-to-month. SCG disagreed with this statement during verification and listed tools it uses to track progress; however, blueCONSULTING found no indication that they were used to track progress on a more frequent basis. Further, SCG acknowledges that the quarterly reports are the primary “management tool” used for assessing program status.
- From 1998 through 2001, formal budget to actual expense comparisons were performed only annually. No formal “budget-to-actual” reports were generated for SCG’s use in managing programs prior to 2002. Energy efficiency program budget to actual expense comparisons occurred on an informal basis monthly, but on a formal basis only annually. In 2002, SCG took steps to implement formal procedures for tracking budget versus actual expenditures.

- Processes and procedures for tracking budget versus actual expenditures and committed funds are based on monthly reports from utility accounting systems coupled with monitoring by program supervisors and managers. Although monthly data is available to the program managers, we found no evidence of routine use.
 - ⇒ Program supervisors and managers are charged with tracking progress based on data from SAP, EETS, and other databases. They compare data on expenditures and energy savings to established budgets, targets and goals. Data on actual expenditures are available to program staff from the SAP system which is updated on a monthly basis.
 - ⇒ Whether program staff reviews the data on a monthly, or even a quarterly, basis is not evident. The fact that data is available provides no assurance that program managers actually summarize the data into a form that is useful for tracking actual expenditures relative to budget and SCG was not able to provide blueCONSULTING with any actual budget-to-actual comparisons other than the annual reports filed with the Commission.
 - ⇒ Surprisingly, none of the managers indicated that their ability to track and control their programs suffered in any way from a lack of sufficient data on budgets or expenditures.
- SCG indicates that program managers are accountable to their supervisors on at least a quarterly basis and to upper management who conduct individual program manager meetings. Variances are discussed in staff meetings that are held more frequently during the second half of the year when trends in spending and energy savings are better defined.
- **Exhibit IV-68** shows the original budget, recorded expenditure and variance for each program from 1998 through 2002. Total variances since 1999 have not exceeded 6 percent.

Exhibit IV-68: Total Variance of Budget to Recorded Expenditures Did Not Exceed 6% During the Audit Period
(Dollars in Thousands)

Program Category	1998			1999			2000		
	Budget	Recorded	Over or (Under)	Budget	Recorded	Over or (Under)	Budget	Recorded	Over or (Under)
Residential	\$7,121	\$2,309	67.6%	\$9,296	\$7,306	21.4%	\$9,799	\$9,446	3.6%
Nonresidential	14,027	11,519	17.9%	13,332	11,391	14.6%	13,202	13,358	(1.2)%
New Construction	2,400	2,473	(3.0)%	4,564	4,496	1.5%	4,719	4,965	(5.2)%
MA&E & Regulatory Oversight	1,369	1,646	(20.2)%	822	474	42.3%	2,840	2,397	15.6%
Shareholder Incentive	1,982	1,982	0.0%					1,822	
Cross-cutting/Other	0	0	0.0%	0	0	0.0%	0	0	0.0%
Total	\$26,899	\$19,929	25.9%	\$28,014	\$23,667	15.5%	\$30,560	\$31,986	(4.7)%

Program Category	2001			2002		
	Budget	Recorded	Over or (Under)	Budget	Recorded	Over or (Under)
Residential	\$8,035	\$7,846	2.4%	\$5,211	\$4,536	13.0%
Nonresidential	\$13,570	13,732	(1.2)%	\$7,869	7,441	5.4%
New Construction	\$6,316	7,448	(17.9)%	\$3,297	3,151	4.4%
MA&E & Regulatory Oversight	\$2,899	2,481	14.4%	\$1,037	1,037	0.0%
Shareholder Incentive	\$2,082	1,331	0.0%	\$0	0	0.0%
Cross-cut/Other DSM	\$1,030	1,030	0.0%	\$4,682	4,422	5.6%
Subtotal	\$33,932	\$33,867	0.2%	\$22,096	\$20,587	6.8%
Summer Initiative	\$4,000	\$3,960	1.0%	\$4,000	\$3,967	0.8%
Total	\$37,932	\$37,827	0.3%	\$26,096	\$24,554	5.9%

Note: SCG disputes that PY 2002 was overspent.

C58. While SCG achieved its 2002 milestone goals (e.g., hard-to-reach (HTR), numbers of surveys completed), it failed to achieve its therm savings goals in three of its six programs with energy savings goals.

- During the audit period, program goals were developed based on prior year's program experience, limited market analysis, and consultation between program managers and their supervisors.
- As shown in **Exhibit IV-69**, while SCG achieved its overall therm savings goal, half of its programs underperformed relative to their therm savings goals.

Exhibit IV-69: SCG Failed to Achieve Energy Goals in Several Programs

Energy Savings Goals

Program	Goal			Achievement		
	MWh	Therms	kW	MWh	Therms	kW
Single Family Rebate	2,586	925,000	1,380	2,886	1,056,111	(170)
Multifamily Rebate	2,440	575,000	840	65	283,827	83
Express Efficiency	17	2,190,000	NA	5	2,559,064	NA
Nonresidential Financial Incentives	NA	1,256,000	NA	NA	2,307,288	NA
Energy Star Homes	521	86,000	4,000	814	78,285	9,354
Savings by Design	8,486	49,000	4,630	2,560	3,538	439
Total	14,050	5,081,000	10,850	6,330	6,288,113	9,706

Milestone Goals

Program	Goal	Achievement
Single Family Rebate	11% of applicants from HTR	24% of applicants from HTR
Multifamily Rebate	10% of applicants from HTR	34% of applicants from HTR
Energy Efficiency Survey	1,500 surveys and 2 languages	40,000 surveys and 2 languages
Diverse Markets Outreach (DMOP)	200,000 homes 40,000 businesses	224,650 homes 46,473 businesses
Education and Training	40 outreach events	67 outreach events
Express Efficiency	42% of applicants from HTR	42% of applicants from HTR
Nonresidential Energy Audits	300 audits from HTR	741 audits from HTR
Energy Star New Homes	20% of Direct Implementation funds	61% of Direct Implementation funds
Savings by Design	1 project outside LA	1 project outside LA

Source: 2003 AEAP and direct testimony, blueCONSULTING analysis.

- According to SCG, the failure to achieve the goals for these programs was based in part on the fact that the program goals were based on a 12 month period, whereas the programs were operational for only nine months.

C59. The energy savings associated with commitments dropped in future years are not routinely assessed against the energy savings amounts claimed in the year of the commitment. Thus, annual reports showing the percentage of energy savings goals achieved are subject to change in subsequent years as drop-offs occur, and reported energy savings may be higher than actual, final energy savings. To date, no true-up process has been agreed upon between the Commission and the utilities, including SCG.

- The commitment process has been in place since 2002. For the most part SCG did not track or report commitments prior to 2002.
 - ⇒ SCG's tracking of commitments is done off-line by the Policy and Analysis groups. From 1998 through 2001, there were only two programs that maintained program commitments beyond the program year: the Residential Contractor Program (RCP) and SBD.
 - ⇒ In 2002, commitments were carried for three additional programs: Residential New Construction, Building Operator Certification (BOC) and Emerging Technologies. The only other program commitment associated with 1998 through 2002 programs is the Third Party Contracts. These commitments began in 2002 and do not close out until 2005.
- In general, funds are committed upon approval of a customer application for rebate or on entering a formal agreement with a program participant to install energy saving measures in accordance with various energy efficiency program rules. Commitments as a whole are not tracked throughout the year. For nonresidential rebate programs, filled-out applications are tracked in MAS.
- When committed funds are dropped during the year of the commitment, they become available to the same program to use for new commitments or expenditures. If committed funds from one year are dropped in a subsequent year, the funds are held in the balancing account for use only upon Commission approval. The energy savings associated with commitments dropped in future years are not routinely "trued-up" against the energy savings amounts claimed in the year of the commitment. Thus, energy savings goals reported in the Annual Reports are subject to change in subsequent years as drop-offs occur. This "true-up" issue is the same for all the California utilities.
- SCG does not have a "policy and/or procedural" manual that specifies why, how and when a commitment is cancelled. Each program uses its own procedure, which is typically based on the customer participation agreement. Commitments are solidified in the form of a customer-signed program participation application form. A project is cancelled when the participating customer fails to complete the action specified in the participation form, either by doing something other than what was specified, or by failing

to complete the action specified in the application form. Internal tracking mechanisms are maintained by the program staff to track these cancellations.

- The commitments recorded at the end of program year 2002 are shown in **Exhibit IV-70** following:

**Exhibit IV-70: SCG's 2002 Program Year Commitments Totaled \$1.4 million
(Dollars in Thousands)**

Programs	Funds Committed 2002
Residential Single-Family Rebate Program	\$0
Residential Multi-Family Rebate Program	0
Non-Res Express Efficiency	0
Non-Res Financial Incentives*	10
New Construction - Energy Star Homes	920
New Construction - Savings by Design	245
Building Operator Certification	29
Emerging Technologies	107
Education and Training	0
Home Energy Efficiency Survey	0
Nonresidential Energy Audits	0
Codes and Standards	0
Diverse Markets Outreach (DMOP)	50
Total	\$1,361

Source: 2002 Energy Efficiency Programs Updated 4th
Quarter Status Report, May, 2003.

- **Exhibit IV-71** provides the level of remaining commitments by program and year, after incentives were paid or cancelled, during the audit period. For most programs, the remaining amount of commitments was substantial.

Exhibit IV-71: Remaining Commitments for Most Programs Were Substantial at Year End 2002

Program Name	Program Year	Calendar Year	Incentive Commitments (made during the year) ¹	Incentives Paid (made during the year)	Incentives Cancelled (at year end)	Remaining Commitments (at year end)
Savings By Design	2000	2000	\$58,453	\$1,533		\$56,921
		2001				56,921
		2002				56,921
Savings By Design	2001	2001	543,087			543,087
		2002				543,087
Savings By Design	2002	2002	297,302			297,302

Program Name	Program Year	Calendar Year	Incentive Commitments (made during the year) ¹	Incentives Paid (made during the year)	Incentives Cancelled (at year end)	Remaining Commitments (at year end)
RCP-MF	2000	2000	1,981,865	330,486		1,651,379
		2001		880,046	20,474	750,859
		2002		282,424	245,242	223,193
RCP-MF	2001	2001	900,000	456,574		443,426
		2002		436,299	43,415	(36,288)
California Energy Star New Homes	2002	2002	939,200	39,810		899,390
Emerging Technology	2002	2002	394,201	72,675		321,526

Note 1: Commitments represent the maximum exposure under the terms of the program application signed by the customer. For RCP-MF payments represent both the initial and final (after-verification) payments. "Commitments Cancelled" therefore represents not only job cancellations, but "dollar" cancellations (where the sum of the initial payment plus final after-verification payment was LESS than the maximum-exposure commitment amount for each job).

Source: SCG response to Data Request SCG-MCL-009.

C60. SCG has no formalized policies and procedures that define and control the decision-making process regarding the use of in-house staff versus vendors, although informal criteria exist.

- According to SCG, work is generally outsourced when (1) it is required to be outsourced as part of the program (e.g., the "statewide" programs); (2) SCG already has an outsourced agreement to conduct the activity; or (3) existing resources could not be redeployed.
- Other factors influencing the decision include:
 - ⇒ Time available to meet identified goals or conduct required work;
 - ⇒ Approaches discussed and agreed upon with the statewide, cross-utility teams assigned to each statewide program;
 - ⇒ Availability of internal staff to conduct required activities; and
 - ⇒ Skill set of internal staff to conduct required activities.
- A sample of nine contracts was tested for compliance with these criteria. blueCONSULTING discussed the nature of the outsourced work with the relevant managers and analyzed the appropriate contract documents, and found that the sampled contracts generally met the criteria indicated by SCG.

C61. Processes used to select contractors need strengthening to assure that value is received for energy efficiency dollars spent.

- Many SCG contractors are selected on a sole-source basis from qualified consultant lists that are established without a competitive process. For example, out of a total of 65 contracts that were in place among energy efficiency programs in 2002, blueCONSULTING selected a test sample of nine large dollar contracts from three of the energy efficiency programs and found that none had been initiated through a competitive selection process.
- In all nine cases, the program managers overseeing the contractors indicated that the contractor was selected as a result of their (1) unique expertise; (2) long-term experience with SCG programs; (3) requirement under a statewide program; or (4) cost-effective statewide use by the other utility companies.

C62. SCG's authorization levels for energy efficiency program expenditures have been established and disseminated through corporate policies and procedures that appear reasonable and appropriate. While the policy is good, the degree of compliance with policy is unknown, as error rates were not tracked.

- Sempra Energy's corporate policy, as last revised on July 31, 2002, provides policy guidelines governing approval limits of Supervisors, Managers and Directors as shown **Exhibit IV-72**.

Exhibit IV-72: Confidential Exhibit - Redacted

- All the Managers interviewed were aware of the policy on authorization levels and indicated that they monitor and comply with it.
- The SAP system, which tracks program expenditures, contains a feature that automatically flags expenditures requiring approval for the proper authorization level within the organization. For periods prior to SCG/Sempra's systems and procedures integration, program expenditures were not under SAP control.
- Our testing of non-residential rebates found that 56 percent of the sampled applications were approved by staff who did not have the required signature authority.

C63. SCG's program for verification of vendor work and on-site inspections is not effective.

- Beginning in 2002, all contractors responsible for installing or implementing energy efficiency measures were hired by customers, not by SCG, thus shifting some contractor control responsibility to the customer. Nevertheless, SCG inspects the work of these contractors on a random basis, with sample sizes varying from 5 percent to 100 percent, as shown in **Exhibit IV-73**. Other types of contractor work performance are verified by program supervisors' or managers' review of contractor reports and work products.

Exhibit IV-73: 2003 Inspection Sample Size for 2002 Programs [Note 1]

Program	Measures	Recommended Inspection Rate
Commercial New Construct	All	100%
Multifamily Rebate	All	100%
Single Family Rebate	All	5%
Express Efficiency	All	5%
Nonresidential Financial Incentives	All	5%

Note 1: Based on additional criteria, some Single Family rebate applications are inspected 100 percent, e.g. customers who self-install insulation, applications that use contracts or proposals as proof of payment, according to SCG.

Source: SCG memo on inspections in 2003 (SCG-AR-002).

- Despite thousands of inspections and confirmations performed by account executives during the period 1998 through 2002 (with payment check in hand) SCG did not document any inspection failures. The absence of documented inspection failures raises questions about the thoroughness of the inspections and confirmations performed or the adequacy of SCG's procedures.
- ⇒ SCG provided data indicating they conducted thousands of on-site inspections under their various energy efficiency programs to verify that energy savings measures were properly implemented. **Exhibit IV-74** shows the number of inspections conducted either by inspectors or account executives under each energy efficiency program for PY 1998-2002.

Exhibit IV-74: Over 15,000 Inspections Were Performed During 1998-2002

Program/Measure	Inspections	Comments
1998		
Residential SPC/Controllers	500	
Residential SPC/Showerheads	3,500	
Small Nonresidential Comprehensive Retrofit	1,135	It is Company protocol for rebate payments to be <u>delivered in person by an account executive</u> who at that time confirms that the measure is installed. It is not required that the confirmation be documented.
Nonresidential Process Overhaul	101	It is Company protocol for rebate payments to be <u>delivered in person by an account executive</u> who at that time confirms that the measure is installed. It is not required that the confirmation be documented.
Select Technologies	17 (100%)	Company protocol is that payments are made in person and at minimum the project is evaluated.
Energy Advantage Homes Program	613	
1999		
Residential Contractor Program - Multi Family	2 (100%)	
Residential Contractor Program - Single Family	not available	The on-site visits were coordinated through SCE and it is SCG's understanding that about 20% of installations were inspected.
Residential Upstream Gas Air Conditioning Program Element	10	
Small Nonresidential Comprehensive Retrofit	1,051 (100%)	It is Company protocol for rebate payments to be <u>delivered in person by an account executive</u> who at that time confirms that the measure is installed. It is not required that the confirmation be documented.
Nonresidential Process Overhaul	146	It is Company protocol for rebate payments to be <u>delivered in person by an</u>

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Program/Measure	Inspections	Comments
	(100%)	<u>account executive</u> who at that time confirms that the measure is installed. It is not required that the confirmation be documented.
Select Technologies	9 (100%)	Company protocol is that payments are made in person and at minimum the project is evaluated.
Energy Advantage Homes Program	2,707	
Local Government Energy Efficiency Program	1	
2000		
Residential Contractor Program - Multi Family	98 (100%)	
Residential Contractor Program - Single Family	not available	The on-site visits were coordinated through SCE and it is SCG's understanding that about 20% of installations were inspected.
Residential Upstream Gas Air Conditioning Program Element	61	
Small Nonresidential Comprehensive Retrofit	1,564	It is Company protocol for rebate payments to be <u>delivered in person by an account executive</u> who at that time confirms that the measure is installed. It is not required that the confirmation be documented.
Nonresidential Process Overhaul	213	It is Company protocol for rebate payments to be <u>delivered in person by an account executive</u> who at that time confirms that the measure is installed. It is not required that the confirmation be documented.
Select Technologies	21 (100%)	Company protocol is that payments are made in person and at minimum the project is evaluated.
Energy Advantage Homes Program	13,019	Dwelling units.
Savings By Design	1	
2001		
Single Family EE Rebates	1,250	
Multifamily EE Rebates	185	
Summer Initiative - Pre-installation	40	
Summer Initiative - Post-installation	90	
Express Efficiency	467 (100%)	It is Company protocol for rebate payments to be <u>delivered in person by an account executive</u> who at that time confirms that the measure is installed. It is not required that the confirmation be documented.
Small Nonresidential Comprehensive Retrofit	339 (100%)	It is Company protocol for rebate payments to be <u>delivered in person by an account executive</u> who at that time confirms that the measure is installed. It is not required that the confirmation be documented.
Nonresidential Process Overhaul	226 (100%)	It is Company protocol for rebate payments to be <u>delivered in person by an account executive</u> who at that time confirms that the measure is installed. It is not required that the confirmation be documented.
Savings by Design – New Construction	0	
Energy Advantage Homes Program	2,864	
Emerging Technologies	20 (100%)	Company protocol is that <u>payments are made in person</u> and at minimum the project is evaluated.
2002		
Single Family EE Rebates	447	Each IOU individually or in certain instances on a statewide basis would determine inspection levels that would be reasonable to minimize fraud and ensure that qualifying energy efficient measures were installed in customers' homes. Inspection levels also varied when failures of inspections were higher than normal levels such as in the Residential Contractor Program.
Multifamily EE Rebates	17	Each IOU individually or in certain instances on a statewide basis would determine inspection levels that would be reasonable to minimize fraud and ensure that qualifying energy efficient measures were installed in customers' homes. Inspection levels also varied when failures of inspections were higher than normal levels such as in the Residential Contractor Program.
Express Efficiency	571 (100%)	It is Company protocol for rebate payments to be <u>delivered in person by an account executive</u> who at that time confirms that the measure is installed. It is not required that the confirmation be documented.
Nonresidential Financial Incentives Program	388 (100%)	It is Company protocol for rebate payments to be <u>delivered in person by an account executive</u> who at that time confirms that the measure is installed. It is not required that the confirmation be documented.
CA Energy Star New Homes Program	492	
Savings by Design – New	7	

Program/Measure	Inspections	Comments
Construction		
Emerging Technologies	10 (100%)	Company protocol is that <u>payments are made in person</u> and at minimum the project is evaluated.
Total inspections	15,613	

Source: SCG response to data request SCG-AR-001.

- ⇒ According to SCG, if a project does not meet the terms and conditions of the program, the project is cancelled and zeroed out in MAS and is not counted as a “failure”. According to SCG, since the start of Express in 1999, all rejected applications have been maintained by the Express Program Manager.
- ⇒ During 2003, some inspection failures were reported by the Quality Control Supervisor for the Inspection Unit of SCG. The Supervisors’ unit began inspections in April, 2002. However, the account executives continue to conduct compliance inspections when visiting the site with a payment check. According to the Supervisor, if the inspector finds some problems that will reduce or void the rebate, SCG does not want the inspectors to confront the landlord. Instead, the inspector files his report with SCG and a letter is sent out to the customer to explain the problem.
- While nonresidential programs constituted a large majority of the inspections and confirmations during 1998 through 2002 as shown in the exhibit, SCG could provide no reports to document that the account executives actually inspected the work prior to payment. The account executives involved with most of these inspections and confirmations were not required to provide any documentation of the results.
- Target inspection rates for certain programs may not be consistent with past program experience.
- ⇒ A continuation of the current inspection policy of a 5 percent random sample of all single family and express efficiency rebate applications is planned.
- ⇒ According to SCG, the sampling requirement for SCG’s Single Family Rebate Program and Express Efficiency Program were driven primarily by the budget. SCG did not have a specific budget allocated for inspections at the time inspections were implemented for the programs and it was determined that 5 percent was a reasonable percentage that would not negatively impact the program’s ability to provide the maximum rebates and reach the program targets.
- ⇒ However, analysis of the inspection results in the single-family rebate program indicates that 16 out of the 28 failed inspections (57 percent) involved installation of attic or wall insulation. This data suggests that employment of an inspection selection strategy emphasizing measures with high failure rates like attic insulation, could provide more payoff to SCG than the random sampling currently employed.
- Contractor invoices are to be reviewed by Program Supervisors and Managers if the amount of the invoice requires a higher level of authorization for payment, as specified

under corporate policy. blueCONSULTING's review of 156 vendor payment transactions found that 21 percent did not contain sufficient evidence that the work had actually been performed.

Accounting and Cost Tracking

C64. SCG uses its reports to the Commission as its primary record of budget to actual and of available funds going forward, and did not develop internal reports for its own use during much of the audit period. In contrast, the other utilities use detailed, internally generated tracking and accounting reports to manage their programs. For example:

- SCE prepares biweekly progress reports which track each program's progress against energy savings and milestone goals. These reports also track expenditures and commitments against approved budgets. The reports are distributed biweekly to the program managers and are reviewed by upper level management (typically monthly).
- Detailed reports of program expenditures are generated by SCE's accounting system on a monthly basis and are distributed to the program managers for review. The program managers are required to review the report for accuracy, and notify the financial support group of any errors. Errors are reviewed and corrections are made as appropriate.
- SCE also produces reports to the Commission. These reports are reconciled against the accounting information, but are not used to manage the projects.

C65. Although the processes SCG uses to disburse incentives and rebates are adequately integrated with the corporate financial accounting system, SCG has not established appropriate checks and quality control procedures regarding payment of incentives or rebates.

- Rebates paid under SCG's Single Family and Multifamily Residential Rebate Program are currently processed by a central unit within (location redacted for reasons of confidentiality). The unit is required to maintain an error rate under 5 percent and includes a rebate quality assurance employee whose role is to review and verify the payment amounts determined by the processors before payments are finalized. Based on our data request for 2002 error rates, SCG indicated that during 2002 error rates were not tracked.
- Based on a 2002 internal audit, un-cleared checks and POs from contractors were used as a basis to pay customer rebates even though these documents did not assure that the customer actually purchased the measure(s). Although SCG management agreed in May 2003 to strengthen the process, a list of acceptable forms of evidence of payment had not been established at the time of our audit. Our review of the draft rebate-processing manual dated August 19, 2003 found that the guidance still does not ensure that the customer's purchase of the measure is verified as part of the application approval process. Under current procedures, an invoice from a contractor to the customer (whether paid or not) would be accepted as proof of purchase.

- SCG approved some rebate applications on a date preceding the date of the application. In the instances found, the application was dated after the deadline for rebate applications, though SCG's approval was dated the last day of eligibility.
- Rebate applications under SCG's Nonresidential Express Efficiency Program are not processed by SDG&E's central processing unit even though that unit processes applications for SDG&E's Express Efficiency Program. Instead, individual processors located at three different SCG offices handle SCG's applications. The Manager for the program indicated that the applications were processed in the same three SCG offices prior to integration and no changes are planned. SCG has no plan to evaluate if any savings would result from consolidating its Express Efficiency applications processing with those of SDG&E in the centralized unit. While SCG focuses on potential cost savings that might be realized from a consolidation, the more important point is how processing standards could be better implemented and how improper payments could be reduced if a single group of processors who were well-trained in policy and procedures were in place.
- blueCONSULTING selected a judgmental sample including large payments and multiple payments to the same payee from SCG's Express Efficiency rebates listing for a two-year period (2001-2002) and found deficiencies in the documentation supporting the payments.
 - ⇒ Of the 157 rebates examined, seven were found to have insufficient documentation to verify the rebate equipment was actually purchased.
 - ⇒ 86 included no documentation that the rebate was approved by staff with the proper approval authority.
 - ⇒ 150 showed no evidence that the rebate equipment installation was inspected or independently verified. We note that SCG did not require program personnel who performed inspections to document such inspections.
 - ⇒ In addition, we identified four payees whose rebates appear to have exceeded the \$25,000 annual maximum amount per account per year. During the two-year period, these rebate recipients exceeded their annual caps by a total of \$57,197.
- Some measures that are selected for inspection prior to payment are being paid even when the inspection doesn't occur. Many selected inspections are returned to the rebate-processing unit with a report of "No Contact" or "Back to Process" due to difficulties in arranging a time for the inspection with the customer or for other reasons. During 2002, approximately 10 percent of the selected inspections for single-family rebates were returned in this manner. We were told that when "No Contact" inspection reports are returned, they are generally paid without conducting the inspection and another rebate is then selected for inspection to take its place. In many cases this occurred because inspectors would try three or four times to make contact with customers or landlords and if no contact occurred, the inspection report would be returned as "No Contact". Discussion with SCG's Analysis and Support Manager indicated that SCG has no

specific policy on whether to pay these rebates when the inspection was not performed, but leaves it to the discretion of the program manager.

Compliance

C66. Requirements for Express Efficiency Program are not strictly followed by SCG.

- The general requirements for this program are:
 - ⇒ Customer must purchase and install as replacement gas equipment at a facility served by SCG.
 - ⇒ Eligible dates varied by program year, e.g., for the 2002 program, purchase invoices were to be dated between April 2, 2002 through December 31, 2002.
 - ⇒ Customer may apply for rebate of up to \$25,000 per account and must agree to equipment verification and participation in evaluation study.
- blueCONSULTING noted instances of product purchases outside the eligible time frame, applications for and payments in amounts exceeding the \$25,000 cap, purchases of equipment that was not clearly qualifying, new, or replacing older, less efficient equipment, or where technical documentation was not provided, and thus not evaluated. (If technical documentation was not provided, it was not possible to evaluate the efficiency of the new equipment.)

C67. Funds charged to the Savings by Design program in 2002 were spent internally at SCG with little or no obvious energy savings benefit.

- Under the Savings by Design program, commercial customers contract to build new construction to specific energy efficiency requirements. Incentives are paid based on exceeding current energy efficiency standards.
- 93 percent of SCG's disbursements were for indirect costs. All disbursements tested were for employee expenses, education, temporary employees, tours, and internal settlements within SCG.
- The total of incentives paid under this program consisted of only two disbursements, both of which took place during the fourth year the program was administered by SCG (February, 2003). Additional incentive payments are expected upon completion of design and installation.

C68. A lack of oversight and controls contributed to expenditures for Residential Audits which seemed excessive.

- The Residential Audit Program consisted of both a mail-in and on-line survey questionnaire for the collection of energy use data from residential customers.

- Payments were made for the development of a web-based customer data collection system, printing and direct mailing services, website testing, processing of mail-in rebates and other consulting services.
- Large change orders, some exceeding 100 percent of the initial contract amount, were noted without evidence of any prescribed need for change orders or the requirement for specific work or specific deliverables associated with the increased contract price.
 - ⇒ SCG exercised poor oversight and control by either issuing two large and important contracts for unrealistically low budgets or by failing to keep these two projects under sufficient supervision so that the projects could be completed in a timely manner and approximately on budget.
 - ⇒ One of the projects at issue was the development of a web-consumer interface for the estimation of potential energy and dollar savings – a project for which scope was predictable and cost was estimable. The amount of cost growth was not explained in SCG records.

5. Recommendations for the Company:

R19. SCG should strengthen its “tone at the top” with regard to compliance with Commission directives and guidelines in the programs area within increased formal communications and increased formal, internal financial reporting. (Refers to Conclusion No. C53)

R20. Increase the frequency of internal or external audits of energy efficiency programs to ensure that the programs are properly managed and that appropriate controls are in place. (Refers to Conclusion No. C54)

- The administration of PGC programs and the management of PGC funds should be included in SCG’s internal audit rotation.
- Program managers should be held accountable for implementing audit recommendations in accordance with Sempra’s own policies.
- Sempra Audit Services Department should conduct follow-up audits and independent checks of the implementation of audit recommendations.

R21. Require routine, formal performance reporting (budget performance and performance against goals.) Reports should be disseminated to and reviewed by management. (Refers to Conclusion No. C57)

- SCG should implement stronger budgetary controls over all energy efficiency programs by formalizing expense tracking and comparison of expenses/expenditures to budget by program on a monthly basis.
- Program managers should be charged with the responsibility of managing to their budgets on a monthly or quarterly period, rather than an annual period.

- In 2002, SCG took steps to implement formal procedures for tracking budget versus actual expenditures.

R22. SCG should adopt stronger controls surrounding the reclassification of costs and expenses. Currently, a program manager can transfer expenses from one program to another based upon his/her judgment alone of what is appropriate. Such reclassifications of costs or expenses should be justified by detailed estimates or calculations. A change in policy would preclude expenses from being adjusted to meet authorized funding levels, a practice which is tantamount to shifting funds outside the guidelines set out by the Commission. (Refers to Conclusions No. C53 and C56)

R23. Identify primary reasons for not meeting energy savings goals for all projects and ensure that future goals are met. SCG should develop the procedures and formal periodic reporting necessary to support informed monthly reviews and intelligent decision-making in response to reported progress toward program goals. (Refers to Conclusion No. C58)

R24. Increase the accuracy of reporting by ensuring that energy savings associated with commitments dropped in future years are routinely “trued-up” against the energy savings amounts claimed in the year of the commitment. SCG should develop a system to track commitments, scheduled payments, expiration dates, and released funds in real-time. (Refers to Conclusion No. C58)

R25. Strengthen the process used to select contractors, including utilizing competitive bidding. (Refers to Conclusions No. C60 and C61)

- SCG should develop formalized policies and procedures that define and control the decision-making process regarding the use of in-house staff versus vendors or subcontractors.
- Consider implementing a standard periodic round of RFP’s to systematically update qualified contractor lists and reduce reliance on sole-source contracts.
- SCG should adopt criteria that provide assurance that rates charged are consistent with both market rates and value delivered, that vendors or contractors selected are qualified to do the work required, and that at least two qualified competing vendors are considered before a selection is made.
- In addition, vendors should be rated by the contracting officer when a job or contract is complete, so that poor performers are removed from SCG’s pool of qualified vendors or consultants.

R26. Improve vendor management processes. (Refers to Conclusion No. C63)

- SCG should ensure that contractor invoices are reviewed by staff having the required approval authority and that such reviews are clearly documented. SCG should require the

documentation include the name of the verifier and the date of the review. A description of what was reviewed/verified should also be included.

- Evidence of any review of contractor work to assure compliance with contract terms should be documented so as to support any later review of contractor performance.

R27. Improve the on-site inspection process. (Refers to Conclusion No. C63)

- SCG should require third party signatures on all inspection reports except those showing failed or partially failed implementation of the inspected measures.
- Develop an inspection selection strategy for each program that emphasizes selection of measures with high dollar amounts and high past failure rates (i.e. cluster sampling rather than pure random sampling).
- Review the basis for deciding on a 5 percent inspection rate for SCG's Express Efficiency Program with consideration to the inspection rates used by other utilities and their identified failure rates.
- For all programs where account executives inspect or confirm that measures are properly installed prior to payment, require that they fill out a simple form to document inspection.

R28. SCG should redesign and upgrade procedures and systems to include standard procedures, systems with controls and standard reports, and the use of new system capabilities to manage programs effectively. PGC program disbursements are based on offline systems and non-ledger memorandum accounts. SAP is used, but only for cost accumulation and limited variance reporting of program expenditures against authorized budgets. (Refers to Conclusions No. 53, 57, 62, 64 and 65)

R29. SCG should undertake significant systems improvement in the entire program management area with specific emphasis on ensuring that: (Refers to Conclusions No. 53 and 61)

- vendors are paid within the terms of contracts,
- contracts reflect fair value for services rendered,
- specific vendors do not receive a disproportionate share of energy efficiency programs business unless good performance and pricing so warrant, and
- vendors are not paid twice for the same services.

R30. Establish appropriate checks and quality control procedures regarding payment of incentives and rebates. (Refers to Conclusion No. 65)

- SCG should ensure that rebate applications are approved by staff with the required approval authority. That review and approval should be clearly documented to reflect the approver and the date of the approval.

- Evaluate what, if any, savings would result from consolidating SCG's Express Efficiency applications processing within the current centralized rebate-processing group.
- Ensure that when rebates are selected for inspection, they are paid only if the inspections are completed or if the inspection is cancelled for reasons other than the customer's lack of contact or cooperation.
- SCG should strengthen rebate-processing procedures by including more detailed instructions on acceptable forms of evidence designed to confirm that applicants actually paid for rebate measures.
- SCG should record the date of all applications as the actual date received and should adhere to the actual deadlines set out by the Commission.
- SCG should record approvals of applications as of the actual date of approval.

6. Policy Issues for the Commission:

None.